THE INFLUENCE OF WOMEN'S BODY DISSATISFACTION ON CAREER ASPIRATIONS AND PERCEIVED CAREER BARRIERS

by

Alexandra Grande Pappas

A dissertation submitted to the faculty of
The University of Utah
in partial fulfillment of the requirements for the degree of

Doctor of Philosophy

Department of Educational Psychology

The University of Utah

December 2016

The University of Utah Graduate School

STATEMENT OF DISSERTATION APPROVAL

The dissertation of **Alexandra Grande Pappas**

has been approved by the following supervisory committee members:

Paul Gore, Jr.	, Chair	**7/29/2016** Date Approved
Amy Jo Metz	, Member	**7/29/2016** Date Approved
Susan L. Morrow	, Member	**7/29/2016** Date Approved
Michael K. Gardner	, Member	**7/29/2016** Date Approved
Edward Buendia	, Member	**7/29/2016** Date Approved

and by **Anne Cook** , Chair/Dean of

the Department/College/School of **Educational Psychology**

and by David B. Kieda, Dean of The Graduate School.

ABSTRACT

Body dissatisfaction affects women across the world and may have serious implications on their career and educational pursuits. A sample of 724 women completed an online survey designed to explore the relationships between body dissatisfaction, career aspiration and expectation discrepancies, educational aspirations, and perceived career barriers. Ordinal and logistic regression analyses were conducted to explore associations between variables. Results indicated a significant positive relationship between women's body dissatisfaction and discrepancies in the complexity of their career aspirations and expectations. A significant inverse relationship was illustrated between women's body dissatisfaction and educational aspirations. When controlling for BMI, self-esteem, and perceived career barriers, results varied in regards to the impact of women's body dissatisfaction on career aspiration/expectation discrepancies and educational aspirations. It appears that BMI may be more predictive than body dissatisfaction of discrepancies in the congruence of women's career aspirations and expectations and educational aspirations when controlling for perceived career barriers and self-esteem. Due to violations of normality within the data, results should be interpreted with caution. Implications for future research and limitations of the study are discussed.

TABLE OF CONTENTS

LIST OF TABLES

ACKNOWLEDGEMENTS

This project would not have been possible without the support of various individuals. First, I would like to acknowledge my family, friends, and partner who have been my primary support system throughout my life and time in graduate school. Next, to my primary adviser, Paul Gore, Jr., thank you for your ongoing guidance throughout my graduate training. To the additional committee members on this dissertation, A.J. Metz, Sue Morrow, Mike Gardner, and Ed Buendia, thank you for your willingness to assist in the creation of this study and support my research interests. I would also like to acknowledge the many faculty members and support staff within the Counseling Psychology program, Department of Educational Psychology, and University Counseling Center at the University of Utah who have been pivotal in my development as a professional. I would also be remiss for not acknowledging my intern cohort-mates at the College of William and Mary, Rebecca Shoemaker and Mark Sanders, for their support throughout the creation of this study. In addition, the entire counseling center staff at the William & Mary Counseling Center has been crucial in assisting me through the internship and dissertation process. Finally, I would like to acknowledge my canine-companion, Alta, for his remarkable patience and unconditional love throughout the dissertation process.

INTRODUCTION

Body dissatisfaction is a significant issue for women. A recent study spanning 26 countries and 10 world regions identified female body dissatisfaction as an "international phenomenon," with women in the Americas reporting the highest body dissatisfaction in the world (Swami et al., 2010, p. 320). Sadly, these findings are not new. Body dissatisfaction has long been considered a "normative" experience for women (Calogero, Boroughs, & Thompson, 2007; Rodin, Silberstein, & Streigel-Moore, 1984; Smolak, 2006). A 2005 survey examining beauty ideals of women across 10 countries found that 90% of women aged 15-64 want to change at least one aspect about their physical appearance, with body weight ranking highest for desired area for change (Etcoff, Orbach, Scott, & D'Agostino, 2005). Indeed, research indicates that there is a positive linear relationship between body weight and body dissatisfaction for women (Muth & Cash, 1997; Presnell, Bearman, & Stice, 2004). While body dissatisfaction may be a result of various factors, weight is among the most salient (Etcoff et al., 2005), which is concerning given trends in obesity in the United States.

According to the U.S. Center for Disease Control and Prevention (CDC) classifications of body mass index (BMI; CDC, 2014), a ratio of one's weight and height, 33% of U.S. adults meet criteria to be considered obese, and 66% of U.S. adults meet criteria to be considered either overweight or obese (Ogden, Carroll, Kit, & Flegal, 2014). These statistics are troubling given the number of health risks associated with elevated

body fat, including cardiovascular disease, type 2 diabetes mellitus, high blood pressure, and some cancers (Ogden et al., 2014); however, it is important to note that there have been alternative views on the impact of body weight on physical health, such as the Healthy at Every Size (HAES, n.d.) movement that asserts that elevated body weight does not necessitate poor physical health. Conversely, low body weight does not necessarily indicate that one is in good health. HAES advocates for individuals to aspire to good health regardless of size or weight. There are also various non-health-related effects associated with body weight. The World Health Organization's (WHO) comprehensive review of the psychological effects of being overweight or obese found that individuals with high levels of body fat in industrialized countries, particularly women, are more likely to face social bias, prejudice, and discrimination (WHO, 2000). In addition, women experienced an alteration of their body image and reported higher levels of body dissatisfaction (WHO, 2000).

Physical appearance has significant implications for women's lives beyond body dissatisfaction and self-esteem. The Etcoff et al. (2005) study, women who were dissatisfied with their appearance were also likely to withdraw and disengage from important daily life activities. For example, two-thirds of women aged 15-64 in a global study reported avoiding activities such as going on job interviews, attending work or school, and/or sharing an opinion due to feeling badly about their looks. Another study found that high levels of body dissatisfaction in women were associated with poorer health and subjective quality of life (Mond, Mitchison, Latner, Hay, Owen, & Rodgers, 2013).

More recently, research has begun to examine the influence of one's weight in the

work environment. Women generally earn less than men in the workplace; however, women who are overweight and obese are at an even greater disadvantage. Researchers have found that these women encounter reduced wages and decreased family income (Conley & Glauber, 2005; Glass, Haas, & Reither, 2010). Conversely, young women with a BMI in a normal range experience more career success, as employers tend to attribute desirable social characteristics such as intelligence, competence, and cooperativeness to attractive females (Bosman, Pfann, & Hamermesh 2006; Davis & Krawczyk, 2010; Feingold, 1992; French, 2002; Frieze, Olson, & Russell, 1991; Hamermesh & Biddle 1994; Hatfield & Sprecher 1986; Glass et al., 2010; Jackson 1992; Jackson, Hunter, & Hodge, 1995; Umberson & Hughes 1987). Research regarding the impact of weight on job security found that overweight and obese individuals perceived their job status to be insecure more often than individuals who are considered healthy for their weight and height (Ferrie, Shipley, Stansfeld, & Marmot, 2002; Hannerz, Albertsen, Nielsen, & Tuchsen, 2004; Muenster, Rueger, Ochsmann, Letzel, & Toschke, 2011). Further, those who are obese typically complete less education, are less likely to be accepted by prestigious schools, and are less likely to enter desirable professions (WHO, 2000).

Clearly, there is cause for concern given the findings reviewed above. While research has demonstrated the negative impact of body weight in the workplace, especially for women, less information exists on the impact of body dissatisfaction in the workplace and on career planning. The aim of the current study is to more closely evaluate the effect of body dissatisfaction in relation to career development, specifically, the impact of women's body dissatisfaction on career aspirations and expectations,

educational aspirations, and perceived career barriers.

Women's Body Image and Body Dissatisfaction

Beauty ideals refer to "culturally prescribed and endorsed 'looks' that incorporate various features of the human face and body, and thus define the standards for physical attractiveness within a culture" (Calogero et al., 2007, p. 4). Modern Western cultures value thinness in women's body size (Bordo, 2003; Calogero et al., 2007; Suleiman, 1986; WHO, 2000). This was not always the case, however. Bonafini and Pozzilli (2011) reviewed the evolution of the ideal female body represented in artwork and noted a change in the representation of femininity from a symbol of fertility to that of men's sexual desires. This manifested physically as thinner women portrayed in artwork. From 1922-1999, the BMI of Miss America pageant winners declined significantly. Some winners during this period even qualified as underweight according to the National Heart, Lung, and Blood Institute (Bonafini & Pozzilli, 2011; Rubinstein & Caballero, 2000; WHO, 2000). Unfortunately, this beauty standard lives on. Normal weight is classified as a BMI between 21.8-24.9 (WHO, 2000), yet the current perception of ideal female body weight is estimated at a BMI between 18-20 (Bonafini & Pozzilli, 2011). Not only do overweight women not meet the beauty ideals in Western society, they are subject to many negative stereotypes regarding their character (Staffieri, 1967; WHO, 2000). This, unsurprisingly, can lead to a sense of dissatisfaction with one's appearance.

Body image refers to one's perceptions, cognitions, and affect towards their weight status (Cash, 2002; Cash & Pruzinsky, 2002; Liechty, 2010). Body dissatisfaction refers to the "subjective negative evaluation of one's figure or body parts" (Presnell et al., 2004, p. 389). In a sample of adolescent girls, Crocker et al. (2003) found that physical

self-perceptions were more predictive of changes in physical activity, dieting, and physique anxiety than actual body size. Thus, psychological perceptions of one's body size may be more influential than their actual size.

Body dissatisfaction has risen steadily in the United States for decades (Tiggemann, 2001). Some researchers attribute the increase in body dissatisfaction to a reduction in media portrayal of ideal size, coupled with an increase in women's actual weight and body size (Spitzer, Henderson, & Zivian, 1999; Tiggemann, 2001; Wiseman, Gray, Mosimann, & Ahrens, 1992). Groesz, Levine, and Murnen's 2002 meta-analytic study found a significant relationship between exposure to a thin beauty ideal in media images and women's negative body image. As Calogero et al. (2007) explained, being exposed to beauty ideals in the media is "virtually unavoidable" (p. 12).

Perhaps most concerning is the young age at which body dissatisfaction and adherence to the thin ideal begin developing. Studies have found that 81% of girls are afraid of being fat by the age of 10 (Mellin et al., 1991), and 42% of girls in 1st through 3rd grade want to be thinner (Collins, 1991). Another study found that children as young as 6 years old described an obese silhouette with negative characteristics such as "lazy," "dirty," "ugly," "liar," and "cheat" more often than nonobese silhouettes (Staffieri, 1967; WHO, 2000). For some, body dissatisfaction can evolve into a diagnosable eating disorder (National Eating Disorders Association, 2005), as body dissatisfaction has been linked to unhealthy weight control behaviors such as purging, fasting, and laxative use (Neumark-Sztainer, Paxton, Hannan, Haines, & Story, 2006). Stice, Marti, and Durant (2011) reported that adolescent girls with high body dissatisfaction were four times more likely to display eating disordered behaviors than those with lower body dissatisfaction

scores.

While body dissatisfaction occurs for women throughout their lifespan (Calogero et al., 2007; Etcoff et al., 2005), adolescents seem particularly vulnerable to body image concerns due to heightened awareness of one's image and the desire for social acceptance that occurs during this age period (Etcoff et al., 2005; Halpern, Udry, Campbell, & Suchindran, 1998; Harter, 1999; Quinn & Crocker, 1999; Tiggemann, 2001). Adolescent girls also experience biological transformations during this period of time that are incongruent with the thin ideal (Tiggemann, 2001). In a longitudinal study spanning late childhood through late adolescence, girls with a BMI that was greater than the 50th percentile reported higher body dissatisfaction than girls with a BMI below the 50th percentile. For boys, this relationship was only observed when boys had a BMI in the 75th percentile or higher or below the 10th percentile, suggesting that body dissatisfaction occurs more commonly for girls. For both genders, rates of body dissatisfaction increased over time (Calzo et al., 2012). Body image concerns during adolescence can be detrimental in a variety of ways. For instance, a study examining high-school friendships found that as BMI increased (especially for girls), the size of friendship circles decreased (Crosnoe, Frank, & Strassmann Mueller, 2008). Numerous additional studies have found that both adolescent boys and girls experience dissatisfaction with their bodies, and such dissatisfaction is linked to poor self-esteem, negative self-image, and depression (Attie & Brooks-Gunn, 1989; Cafri, Strauss, & Thompson, 2002; Gortmaker, Must, Perrin, Sobol, & Dietz, 1993; Jones & Crawford, 2006; McCreary & Sasse, 2000; Paxton et al., 1991; Thompson, Coovert, Richards, Johnson, & Cattarin, 1995). This may also place individuals at higher risk to be more affected by bullying and/or to become preoccupied

about food and weight issues (Treasure, Caludion, & Zucker). Finally, some studies have found that body dissatisfaction can interfere with academic performance, resulting in a lower GPA (Crosnoe & Muller, 2004; Yanover & Thompson, 2008a; Yanover & Thompson, 2008b). However, these results are under debate, as other researchers found only slight differences in academic performance between children who were overweight and of normal weight (Datar, Sturm, & Magna-bosco, 2004). Nonetheless, academic challenges due to body dissatisfaction may have important consequences for later educational and occupational attainment (Glass et al., 2010).

Women's Body Image and Body Dissatisfaction Across Cultures

The influence of cultural factors on women's body image is uncertain. Historically, Caucasian women have been viewed to be at highest-risk for eating disorders and have shown greater preoccupations with body image (Lucero, Hicks, Bramlette, Brassington, & Welter, 1992; McCarthy, 1990; Nasser, 1988; Nevo, 1985; Story, French, Resnick, & Blum, 1995). However, new trends suggest that this discrepancy may be due to underreporting and under-diagnosis of eating disorders across ethnic groups (Bagley, Character, & Shelton, 2003).

Some studies showed higher rates of eating disordered behaviors (e.g., binging, purging, etc.) in African American and Asian ethnic groups compared to Caucasians (LeGrange, Stone & Brownell, 1998; Story et al., 1995). Park and Epstein (2013) explained that the collectivist tendency of Asian cultures might result in sensitivity towards how others view the individual, which may be particularly important when considering body image (Cohen & Hoshino-Browne, 2005; Nisbett, 2003) Still, some studies found no differences across race/ethnicity in body size assessment, weight

perception, dietary restraint, or binge eating (Cachelin, Striegel-Moore, & Elder, 1998). Additionally, the WHO (2000) reported that Black women in the United States are two to three times more likely than White women to be classified as obese, yet they experience less social pressure to be thin and are significantly less likely to diet over the course of their lives (Striegel-Moore, Wilfley, Caldwell, Needham, & Brownell, 1996).

There is more agreement among researchers with regard to body dissatisfaction across cultures. The most robust finding associated with body dissatisfaction is that in high socioeconomic context and Western cultures, the ideal body is thinner and body dissatisfaction is higher than in lower socioeconomic and non-Western cultures (Calogero et al., 2007; Sobal & Stunkard, 1989; Swami, 2007; Swami et al., 2010). However, given the rise of technology and globalization, there is evidence that suggests body dissatisfaction will increase across the world. For example, a 2004 study observed that the introduction of Western media imagery in Fiji, a country that does not adhere to thin ideals of Western cultures, resulted in girls reporting an increased desire for thinness (Becker, 2004). This finding illustrates the power of media portrayals of women.

An in-depth review of the literature regarding cultural variations in body image is beyond the scope of this study, though it is clear from the research reviewed above that continued research is needed regarding the role of cultural factors on body image and body dissatisfaction.

Body Dissatisfaction and Self-Esteem

Body dissatisfaction and self-esteem are closely tied. Numerous studies acknowledged a stable inverse relationship between body dissatisfaction and self-esteem that does not vary as a function of age or gender (French, Story, & Perry, 1995; Horn,

Newton, & Evers, 2011; Mellor, Fuller-Tyszkiewicz, McCabe, & Ricciardelli, 2010; Mirza, Mackey, Armstrong, Jaramillo, & Palmer, 2011; Park & Epstein, 2013; Paxton, Neumark-Sztainer, Hannan, & Eisenberg, 2006; Tiggemannn, 2005; Wilcox, 1997). However, despite evidence depicting the covariance of these phenomena, the causal direction of this relationship is still uncertain (Mellor et al., 2010; Park & Epstein, 2013). Longitudinal studies aimed at better understanding the nature of this relationship exist, yet the results are mixed. Some studies observed that body dissatisfaction during adolescence predicted lower self-esteem several years later; however, self-esteem was not predictive of body dissatisfaction over this time (Johnson & Wardle, 2005; Tiggemannn, 2005). Mellor et al. (2010) found similar results, but noted that this relationship was no longer predictive for women over the age of 31. Mellor et al. (2010) hypothesized that this finding suggests body dissatisfaction is likely to predict self-esteem among young women, yet that self-esteem may act as a protective factor for older women (Mellor et al., 2010). Paxton et al. (2006) found self-esteem to be predictive of adolescent girls' body dissatisfaction after a 5-year period. Most recently, Park and Epstein's (2013) longitudinal study in a Korean adolescent population noted that body dissatisfaction and self-esteem varied in a unidirectional fashion for boys (self-esteem was negatively associated with later body image distress), while this relationship varied in a bidirectional fashion for girls (higher self-esteem predicted lower body image distress and higher body image distress predicted lower self-esteem). Park and Epstein (2013) suggest that the importance of body image issues in an individual's life influences the relationship between body dissatisfaction and self-esteem. The authors explained,

> a person could be dissatisfied with his or her body but be only mildly emotionally upset if he or she believes that body appearance is of low importance in life.

> Emotional distress seems more likely to occur when an individual believes that body appearance is important and is dissatisfied with his/her body. (Park & Epstein, 2013, p. 404)

The confusion over the relationship between body dissatisfaction and self-esteem is somewhat expected given that both body dissatisfaction and self-esteem are broad constructs that can be measured in a variety of ways (Park & Epstein, 2013; Thompson, Heinberg, L., Altabe, & Tantleff-Dunn, 1999). Clearly, further research is needed to better understand the causal direction of the relationship between body dissatisfaction and self-esteem.

Physical Attractiveness, Body Dissatisfaction, and the Workplace

Kwan (2010) discussed the privilege of meeting beauty ideals in Western cultures, asserting that individuals with such privilege are able to perform "mundane routines with ease," while those without may find this more difficult to do (p. 145). She elaborated, "not only do beautiful individuals have social 'privileges,' their bodies avert stigma" (p. 146). Kwan (2010) coined this experience as "body privilege." Wolf (1991) referred to this as the "beauty myth," which dictates standards of physical attractiveness that women are held to in public and private spheres. Such standards and privilege can have important implications for the lives of women.

Weight is a significant predictor of both body dissatisfaction (Presnell et al., 2004) and perceptions of female attractiveness (Calogero et al., 2007; Tovée & Corelissen, 2001). In Swami and Tovée's (2005) study that sampled British and Malaysian individuals, BMI accounted for 75% of the variance in attractiveness ratings. Singh (2004) reported a "cross-cultural consensus" of lower waist-to-hip ratio figures of females being rated as more attractive. This is consistent with Alley and Scully's (1994)

findings in which photographs of women with lower perceived body weights were rated as more attractive. Thus, it is apparent that weight and physical attractiveness are closely related. Further, weight is significantly associated with women's self-perceived attractiveness (Alley & Scully, 1994; Furnham & Radley, 1989; Nevid, 1984; Rodin et al., 1984). However, one's weight has effects beyond body dissatisfaction and perceptions of physical attractiveness. Cann (1991) asked participants to rate physical and social characteristics in fictitious case scenarios that differed by sex to examine qualities of perceived professional and social competence. He found that, overall, individuals considered competent were rated more physically attractive, and that women considered socially competent had lower estimated weights. Similarly, Davis and Krawczyk (2010) found that female sportscasters who were considered attractive were rated as more credible.

By and large, research suggests that men face little or no disadvantage in the labor market as a result of the their physical appearance (Gortmaker et al., 1993), with one study even noting a significant positive effect of body mass on men's earnings (Morris, 2006). In contrast, larger women, in particular, have been shown to receive lower wages than average-sized colleagues in the workplace (Averett, & Korenman, 1996; Gortmaker et al., 1993; Mitra, 2001). Wage discrepancies between men and women occur in both professional and blue-collar occupations, despite women averaging more overall education than men (Glass et al., 2010). Moreover, women are underrepresented in managerial positions (Haskins & Ransford, 1999; Pagan & Davila, 1997). WHO (2000) and Gortmaker et al. (1993) reviewed research on women in the United States who were overweight in adolescence and young adulthood and found that they were more likely to

experience negative economic consequences such as lower family income, increased poverty rates, and lower marriage rates than women with forms of chronic physical disability during adolescence. Others note that women's size negatively correlates with social and economic mobility (Rothblum, 1992). Additionally, female employees often underperform when their body image concerns are high, when they feel that they may be being judged, and/or they are underrepresented in the workplace (Fredrickson, Roberts, Noll, Quinn, & Twenge, 1998; Kiefer, Sekaquaptewa, & Barczyk, 2004). Ferri and Keller (1986) and Ferri (1988) found that female television news anchors perceived more obstacles in achieving their career goals based on their physical attractiveness in this occupation than male news anchors.

Despite evidence illustrating a history of gender differences in the workplace, some challenge the notion that this is a result of workplace discrimination. Glass et al. (2010) conducted a longitudinal study examining the relationship of body mass, gender, and occupational standing and found "no evidence that women are subject to gender-specific socio-cultural preferences and expectations of employers that affect occupational standing", but rather, a significant indirect effect unique to women of adolescent body mass to later occupational attainment. This correlation remained significant regardless of academic ability, high school performance, and socioeconomic status. Others have also reported that heavy women obtain less education than nonheavy peers (Gortmaker et al. 1993). Specifically, Gortmaker et al. (1993) reported that overweight adolescents earn on average approximately 1 year less of schooling than thinner peers. Thus, issues prior to job entry may indirectly result in significant changes in career trajectories and later career success.

Body Dissatisfaction and Career Theories

People associate beauty with "goodness" (Calogero et al., 2007), which may have important implications on one's career opportunities. For example, according to Dellinger and Williams (1997), women who adhere to cultural beauty ideals such as wearing make-up to work are more likely to be viewed as competent. Additional research has shown that people perceived as attractive are viewed as better-liked, more sociable, independent, and less deviant (Calogero et al., 2007; Eagly, Ashmore, Makhijani, & Longo, 1991). While federal, state, and local laws have been passed in an attempt to combat overt hiring biases, employers are still susceptible to implicit, or unconscious, biases when hiring (Bendick & Nunes; 2012). Perhaps more troubling is that women may have internalized some these biases, as one study observed that women expressed believing that they would be happier, more socially competent, and have improved job opportunities if they met cultural beauty ideals (Engeln-Maddox, 2006). Thus, one's body dissatisfaction may significantly impact what they believe they are capable of achieving in their career pursuits.

Careers are defined as age variations in occupational status throughout an individual's work life (Brueckner, 2004; Glass et al., 2010). Career and job satisfaction have been repeatedly linked to overall life satisfaction (Eggerth, 2008; Lounsbury, Park, Sundstrom, Williamson, & Pemberton., 2004; Wiener, Muczyk, & Martin 1992), as well as cultivating a sense of purpose within one's life (Kosine, Steger, & Duncan, 2008). Thus, understanding the mechanisms through which careers develop is critical in our understanding of the human experience.

Numerous career development theories exist, though for the purposes of this

study, career construction theory (CCT; Savickas, 2002; Savickas, 2005) and social-cognitive career theory (SCCT; Brown, Lent, & Hackett, 1994) will serve as the frameworks through which career development is viewed, as they focus on the interpretive and contextual processes through which individuals direct their careers.

Beauty ideals are social constructions. The career construction theory serves as a counter to a positivist movement in vocational psychology, suggesting that variations in career development are due to each individual's personal and social experiences. One's physical appearance is experienced both personally (via body dissatisfaction) and socially (via beauty ideals); thus, it is reasonable to assume that one's physical appearance and body dissatisfaction may impact career development.

While the CCT integrates the landmark work of Holland (1997) and Super (1957), it emphasizes the importance of subjective experience (Del Corso & Rehfuss, 2011). Careers are established through a series of adaptations rather than maturation. Savickas (2005) elaborates, "Careers do not unfold; they are constructed as individuals make choices that express their self-concepts and substantiate their goals in the social reality of work roles" (p. 43). These expressions can be conceptualized as story lines that fall into three categories: vocational personality, career adaptability, and life themes (Savickas, 2005). Together, these categories explain the ways in which individuals choose occupations based on the self-concepts they hold regarding their potential and competence.

Social-cognitive career theory is a widely studied and empirically supported theory of career development (Brown et al., 1994). SCCT grew out of the principles of observational learning (Bandura, 1991), which posits that there is an interaction between

an individual's biology and environment. Individuals are born with a variety of characteristics such as race, gender, physical abilities, etc. In combination with their biological characteristics, individuals have learning experiences throughout their lives that lead to certain beliefs and expectations. As noted above, it is reasonable to expect that one's body dissatisfaction may be an important characteristic informing one's beliefs and expectations of themselves and their career opportunities.

SCCT applies these tenets to career development, theorizing that individuals generate self-efficacy beliefs and outcome expectations based on their experiences. Self-efficacy beliefs include very specific abilities that individuals feel confident (or a lack of confidence) about. For example, an individual may feel very self-efficacious concerning their athletic ability, but less so about their mathematical ability. Outcome expectations address the outcomes that individuals assume they will achieve from pursuing a certain career. This may include money, stability, independence, prestige, etc. These components lead to specific interests, which lead to goals, which eventually cause action. Importantly, SCCT accounts for factors that may disrupt the flow of this model related to the person, context, and/or experience (Brown et al., 1994).

In summary, CCT and SCCT address the mechanisms through which individuals make decisions about their careers. Primarily, one's self-concept acts as the driving force in instigating career decision-making. And while CCT emphasizes a grander sense of self in the form of narrative, SCCT also accounts for self-concept as a result of one's identities and environment. Thus, while different, these theories are not incompatible and may provide explanations for why certain individuals are ambitious in their career pursuits while others may feel more limited.

Of particular interest to this study is to better understand the role of body dissatisfaction in directing career goals, as body image and body dissatisfaction play an integral role in one's self-esteem and self-concept. Specifically, this study seeks to explain if body dissatisfaction results in perceived barriers to individuals attaining the career of their choice and causes individuals to reduce their career aspirations.

Perceived Career Barriers

Early vocational researchers theorized that internal and external conditions could impede career development (Crites, 1969; Farmer, 1976; O'Leary, 1974). Current research supports this notion and has termed such conditions as "career barriers." Career barriers are defined as events or conditions that occur within a person or externally that make career progress difficult (Crites, 1969; Fitzgerald & Weitzman, 1992; McWhirter, Torres, & Rasheed, 1998; Swanson, Daniels, & Tokar, 1996; Swanson & Woitke, 1997). Internal barriers may include fear of failure, low self-esteem, role conflict, etc., (McWhirter et al., 1998; O'Leary, 1974), while external barriers may include characteristics specific to the workplace such as discrimination in selection, discrimination in promotion, lower pay for equivalent work, exclusion from networks, etc. (McWhirter et al., 1998). In the face of perceived career barriers, individuals run the risk of compromising their career goals, as barriers may evoke anxiety and erode self-confidence (Gottfredson, 1981; Luzzo, 1996; Luzzo & Hutcheson, 1996). Swanson et al. (1996) proposed a two-step process in which individuals evaluate career barriers, where individuals first consider how likely it is that a barrier would occur, and only then consider how much of a hindrance it may be. The authors note an important implication of this process—low ratings of perceived career barriers would consist of two groups of

individuals: those who think there is little likelihood of encountering a barrier, or those who anticipate a barrier occurring, but also believe that they will be able to overcome it.

According to this study's theoretical framework, the context of people's lives and confidence in their abilities to overcome perceived barriers may direct their career goals. SCCT has been named as a model that is particularly well suited to explain perceived career barriers (Swanson et al., 1996), as perceived barriers often result in a decreased sense of self-efficacy, thus deterring individuals from pursuing certain careers. While not as readily cited, CCT would explain perceived career barriers as obstacles that change the narrative of one's life, creating incongruence between one's self-concept and career interests. Ultimately, these theories serve as a sound framework through which we can understand the impact of perceived career barriers on decision-making behaviors.

Perceived career barriers have been studied in individuals of various identity statuses, including race/ethnicity, socio-economic status, sexual minorities, and transgender populations (Budge, Tebbe, & Howard, 2010; Lipshits-Braziler & Tatar, 2012; Luzzo, 1993; Parnell, Lease, & Green, 2010; Slaney, 1980; Slaney & Brown, 1983), and within certain occupational sectors (e.g., television broadcasting, medical professions, etc.) (Aldona & Aiste, 2010; Cochran et al., 2013; Ferri, 1988; Ferri & Keller, 1986; Henry, 2010). Results of these studies consistently illustrate a higher number of perceived career barriers for those belonging to a marginalized group than for individuals belonging to the majority group. For instance, African Americans cite racial discrimination as a career barrier that is perceived to be more problematic than Caucasian Americans (Slaney, 1980; Slaney & Brown, 1983). Parnell et al. found that gay, lesbian, and bisexual individuals note homophobic discrimination as a common perceived career

barrier. Perception of such barriers are not unfounded, as racial, homophobic, and other discrimination have long been documented within the United States and globally, such that legislation such as Affirmative Action and nondiscriminations clauses have been enacted to combat such inequalities (Harrison & Thomas, 2009; Offermann et al., 2014). It is also important to note that the intersection of multiple minority statuses seems to lead to a compounded perception of barriers. For example, Burlew and Johnson (1992) found that African American women in nontraditional careers anticipated both sexual and racial discrimination as factors that may impede their success (McWhirter et al., 1998).

While research continues to emerge regarding the unique career barriers that individuals of minority status perceive, by and large, the majority of research on career barriers has focused on gender differences. Luzzo and Hutcheson (1996) explained, "women's career development appears to be substantially more vulnerable to competing role priorities and environmental demands than men's career development" (p. 126). McWhirter (1994) echoed this claim by finding that high school-aged women cited the perception of significantly more occupational barriers than men. These findings are consistent among college-aged women as well (Luzzo, 1995; Raque-Bogdan, Klingaman, Helena, & Lucas, 2013; Swanson & Daniels, 1994; Swanson & Tokar, 1991). Some barriers are specific to work environment (e.g., occupations that demand hard labor), though there are some barriers that women face consistently, across occupations. These barriers include the following: sexual harassment (McWhirter et al., 1998), sexual discrimination (Cook, 1997; Fitzgerald & Weitzman, 1992; Geis, 1993; Harlan & Weiss, 1982; McWhirter et al., 1998; Ragins & Sundstrom, 1989; Swanson et al., 1996), lack of mentors and role models (Burlew & Johnson, 1992; McWhirter et al., 1998; O'Leary,

1974), self-efficacy expectations (Brown et al.,1994; McWhirter et al., 1998), low outcome expectations (Brown et al.,1994; McWhirter et al., 1998), and multiple role conflicts (Farmer, 1985; Fitzgerald & Weitzman, 1992; Luzzo & Hutcheson, 1996; Swanson et al., 1996).

Beyond the types and frequency of career barriers that individuals may perceive, there are important consequences of such perceptions. As mentioned previously, perceived career barriers may create a sense of anxiety within the individual and cause a process of compromising career goals to occur (Gottfredson, 1981; Luzzo, 1996; Luzzo & Hutcheson, 1996). This may also lead to a decrease in self-confidence and/or self-efficacy regarding career goals (Brown et al., 1994; Gottfredson, 1981; Luzzo, 1996; Luzzo & Hutcheson, 1996). Luzzo (1996) and Swanson et al. (1996) noted that perception of career barriers may increase indecisiveness and ultimately delay or deter career decision-making behaviors. However, perceived career barriers do not always result in negative consequences on career planning. Some evidence has emerged suggesting that individual attribution style, or locus of control (Weiner, 1986), may change the nature of the relationship between perceived career barriers and career planning activities by instigating motivation (Luzzo & Hutcheson, 1996). Individuals who see career barriers as challenges that are within their control (internal locus of control) are motivated to overcome them. Other studies have linked secure attachment styles to fewer perceived career barriers and greater perceived social support in the face of barriers (Wright, Perrone-McGovern, Boo, & Vannatter White, 2014).

Career and Educational Aspirations and Expectations

Multiple researchers have theorized that individuals become aware of occupational preferences early in life. Career aspirations describe work preferences in ideal conditions, while career expectations represent the career choices that individuals perceive as realistic (Metz, Fouad, & Ihle-Helledy, 2009). Similarly, educational aspirations refer to the level of education individuals strive to achieve, while educational expectations refer to the degree they feel is realistic (Gasser, 2013). Of particular interest to this study are CCT and SCCT's explanations of work preferences and career aspirations.

The validity of SCCT's theoretical model in predicting career aspirations has been tested in numerous studies. Results indicated that self-efficacy beliefs and outcome expectations significantly predict career goals and aspirations across diverse populations, and were significantly correlated with perceived career barriers (Ali & McWhirter, 2006; Dahling, Melloy, & Thompson, 2013; Lent, Sheu, & Brown, 2010). Research on the relevance of CCT to the concept of career aspirations is unavailable, though Savickas (2005) describes vocational personality and career adaptability as the "what" and "how" of individual's constructions of careers. Vocational personalities account for the content of careers pursued, while career adaptability explains the process by which careers are constructed. More succinctly, vocational personalities explain an individual's career interests and how they fit their personalities into work roles, while career adaptability addresses how individuals choose careers by shaping their self-concept within the social environment (Savickas, 2005).

Beal and Crockett (2010) examined the validity of career aspirations and

expectations by quantifying differences between participants' cited aspirations and expectations. Their results suggested that there were significant differences reported for career aspirations and expectations, thus supporting the notion that aspirations and expectations are distinct (Gottfredson, 1981; Markus & Nurius, 1986). In addition, career aspirations during adolescence have been shown to be predictive of educational attainment and occupational choice (Beal & Crockett, 2010; Farmer & Chung, 1995; Lent et al., 1994; Schoon & Parsons, 2002; Watt et al., 2012; Webb, Lubinski, & Benbow, 2002; Wigfield & Eccles, 2000). Gottfredson (1981) estimated that children understand status and prestige differences in occupations by the fourth grade. Further, Gottfredson (1981) believed that fourth-graders could distinguish between occupational aspirations and expectations.

Research has aimed to account for the discrepancy between career aspirations and expectations by investigating the influence of cultural context on an individual's vocational behavior (Swanson & Gore, 2000). The majority of research in this domain focuses on the influences of factors such as race/ethnicity, socioeconomic status, and gender on aspirations and expectations. Results have indicated that individuals belonging to marginalized populations experience a larger discrepancy between their career aspirations and expectations. For example, Gasser (2013) found that White students had higher "self-appraisals" of their careers than Black and Asian students. Cook et al. (1996) examined inner-city boys' career aspirations and expectations and found they held occupational expectations reflecting race and class differences in adult jobs as early as second-grade. The gap between their career aspirations and expectations tended to be more realistic as they grew older and were strongly related to lower educational

expectations. These findings are similar to other studies that cite a consistent gap between prestige of aspirational jobs versus expected jobs in African-American and low socio-economic status populations (Bogie, 1976; Cosby & Picou, 1971; Curry & Picou, 1971; Kuvlesky & Bealer, 1966; Kuvlesky & Ohlendorf, 1968). Moreover, Gutman, and Schoon (2012) reported that adolescents with lower academic achievement and from lower socioeconomic backgrounds were more likely to experience uncertainty in their career aspirations.

Research on gender differences in career aspirations and expectations focus on math- and science-related careers (Watt, 2006, 2008). Historically, men are more likely to aspire to such careers, while women aspire to careers that emphasize sociability and nurturing (Mullis, Mullis, & Grewels, 1998; Wigfield & Eccles, 2002). Examination of other dimensions of career aspirations and expectations such as prestige are more limited, and of the research that does exist, results are mixed (Watt et al., 2012). Some findings indicate no gender differences in aspired prestige of jobs (Armstrong & Crombie, 2000; Gassin, Kelly, & Feldhusen, 1993; Mau & Bikos, 2000; Watson, Quatman, & Edler, 2002), while others indicate lower prestige aspirations of females during adolescence (Mendez & Crawford, 2002; Wilson & Wilson, 1992), and finally, some reported just the opposite—adolescent males aspiring to less prestigious occupations (Mau, 1995; Rojewski, 1997).

No literature was found regarding the impact of body image and/or body dissatisfaction on career aspirations, illustrating an obvious gap in the literature. There was also no available literature directly examining impact of body image and/or body dissatisfaction on educational aspirations, though some research on the relationship of

obesity and educational attainment exists. For example, McLaren (2007) observed an inverse relationship between obesity and educational attainment. Cohen, Rehkopf, Deardorff, and Abrams (2013) also found that college graduates were less likely than high school graduates to be obese. Other findings suggest that overweight and obese women tend to obtain less education than their underweight or average-weight peers (Glass et al., 2010; Gormaker et al., 1993; Ogden et al., 2010). Ogden et al. (2010) reported that only 23.4% of women with a college degree were obese, which was significantly lower than obese men or women with only some college attainment. Women with less-than-high-school education displayed obesity rates ranging from 42-51% across racial/ethnic backgrounds (Ogden et al., 2010).

In summary, some factors may act as barriers to one achieving their career goals, or prevent such goals from being set entirely. Moreover, students who perceive themselves as more similar to the norm experience less discrepancy between career aspirations and expectations, suggesting that they perceive fewer barriers to achieving their goals (Metz et al., 2009). These findings fit within CCT and SCCT theories of career development, which posit that individuals' careers develop in relation to their environment and context. Additional research in the future on how body image and body dissatisfaction impact one's career and educational aspirations and expectations would be beneficial in furthering our understanding of these concepts.

Research Questions and Hypotheses

Little research exists regarding the impact of women's body dissatisfaction on academic aspirations and career considerations, yet the implications of such research are

important. Such research may provide more insight on how women make career decisions and could give rise to interventions aimed at helping women feel more confident and capable of achieving their career goals. The current study seeks to better understand the influence of women's body dissatisfaction on career aspirations and career expectations, educational aspirations, and weight-related perceived career barriers. The following research questions are presented:

1) What is the relationship between body dissatisfaction and level of education to which women aspire?

   Hypothesis: Higher body dissatisfaction will be negatively correlated with educational aspirations.

2) What is the relationship between body dissatisfaction and women's career expectations?

   Hypothesis: Higher body dissatisfaction will result in lower career expectations.

3) What is the relationship of body dissatisfaction, BMI, and weight-related perceived career barriers to career aspiration/expectation discrepancies and educational aspirations?

   Hypothesis: Higher body dissatisfaction and body weight-related perceived career barriers will predict higher career aspiration/expectation discrepancies and lower educational aspirations, when controlling for BMI.

4) Do body dissatisfaction, BMI, and weight/size perceived career barriers impact career aspiration/expectation discrepancies and educational aspirations

over and above self-esteem and overall perceived career barriers?

Hypothesis: Higher body dissatisfaction and perceived career barrier scores will predict higher career aspiration/expectation discrepancies and lower educational aspirations when controlling for BMI, self-esteem, and overall perceived career barriers.

METHODS

Design

This study employed a nonexperimental survey method. An online survey was designed including questions assessing demographics, height and weight, career aspirations and expectations, and educational aspirations. Additional scales included the Body Dissatisfaction subscale from the Body Image and Body Change Inventory (Ricciardelli & McCabe, 2002), the Rosenberg Self-Esteem Scale (RSES; Rosenberg, 1986), and the Career Barriers Inventory- Revised (CBI-R; Swanson & Tokar, 1991) with an additional subscale that was added to the CBI-R pertaining to body weight.

Participants

Inclusion criteria for this study required that participants identify as female, be at least 18 years old, and currently be a U.S. citizen. There were 1,113 individuals who participated in this study. Of those participants, 117 did not complete the survey, 45 did not answer validity items correctly, and 227 were excluded for various reasons related to career aspirations/expectations responses (e.g., did not list a specific occupation, listed multiple occupations, or listed an occupation that was unable to be coded via the resources used for this study). Ultimately, 724 participants were included in the final sample for this study.

Of the 724 participants, the average age of participants was 32.59 years old, with a range of 18-83 years of age. Participant ages were distributed as follows: 22.5% of

participants were 18-24 years old, 41.8% of participants were 25-34 years old, 18.1% were 35-44 years old, 10.2% were 45-54 years old, and 4.6% were 55 years or older. All participants were female, and 98.9% of participants identified as cisgender. That is, their biological sex was congruent with their gender identity. One participant identified their gender as "man," 1 participant identified as "transgender man," 4 participants identified their gender as "other" (e.g., "demigirl," "bigender," or "genderfluid,"), and one participant preferred not to report their gender identity. A majority of participants identified as White (74.3%), while the remainder of participants identified as Black/African American (9.1%), Asian American (6.1%), Hispanic/Latina (4.7%), Native American/American Indian (3.3%), other (1.7%) (e.g., "Multiracial"), and 0.7% of participants preferred not to report their race/ethnicity. Most participants identified as heterosexual (80.7%). Remaining participants identified their sexual orientation as bisexual (10.2%), asexual (3%), lesbian (2.2%), pansexual (1%), questioning (0.8%), other (0.8%) (e.g., "demisexual"), queer (0.6%), gay (0.1%), and 0.4% of participants preferred not to report their sexual orientation. Average parental education of participants was as follows: 32.1% Bachelor's degree or higher, 44.1% some college or Associate's degree, 23.4% less than some college, 0.4% were unsure of their parents' education. This was slightly higher than national trends of parental education according to the National Center for Education Statistics (NCES), which reports that approximately 44% of parents in the U.S. obtain less than some college, approximately 28% obtain some college or Associate's degree, and approximately 27.6% obtain a Bachelor's degree or higher (NCES, 2005).

Procedures

Participants were recruited through Amazon's Mechanical Turk (MTurk; www.MTurk.com). MTurk is a data collection platform in which participants register as "workers" and self-select into projects for small compensations. For example, a study requiring approximately 5-10 minutes of work may compensate a worker approximately $.05-.10. A 2011 study suggested that MTurk provides participant samples that are slightly more diverse than typical U.S. college campuses (Buhrmester, Kwang, & Gosling, 2011). This study also reported that MTurk provides rapid, cost-effective, and reliable data collection that is unaffected by compensation rates (Buhrmester et al., 2011).

In order to be eligible for the current study, participants had to meet three inclusion criteria: 1) identify as female, 2) be 18 years or older, and 3) currently be a U.S. citizen. Further, in order to complete the survey, Internet access was required for all participants. Once registered through MTurk, individuals interested in participating in this study were directed to the survey created through the Qualtrics web platform (https://www.qualtrics.com) via a link to complete all informed consent (see Appendix A) and study measures (see Appendix B). In addition, validity items were integrated into the survey (see Appendix B) in order to safeguard against participants who may have been answering questions thoughtlessly.

Upon completion of the survey, participants were given a code to enter into their MTurk account to receive compensation for their participation in the survey. Participants were compensated $.20 for their involvement in this study.

Variables and Measures

Demographics

Information regarding age, gender identity, race/ethnicity, sexual orientation, and parental education were collected. SES was estimated through parental education. Participants selected the highest level of education achieved by each of their parents [or primary caregiver(s)], ranging from "some high school" to "doctoral/professional degree" for both parents. Scores were averaged to create a composite parental education score, ranging from 1-7.

Body Mass Index (BMI)

Participants were asked to provide their height (in inches) and their weight (in pounds), from which BMI was calculated. The following equation was used to calculate BMI (CDC, 2014):

$$BMI = \left[\frac{Weight\ (lbs)}{Height\ (ins)}\right] \times 703$$

Body Image Dissatisfaction Subscale

Participants were asked to complete the Body Image Dissatisfaction subscale of the Body Image and Body Change Inventory (Ricciardelli & McCabe, 2002). A revised 5-item version of this subscale, which combines items regarding body weight and shape due to strong correlations between items (r >.9) was used in this study (Fuller-Tyszkiewi, Skouteris, McCabe, & Mussap, 2012). The revised subscale shows evidence of reliability and convergent validity (Cronbach's alpha >.85; positive correlations with predictors of body dissatisfaction) (Fuller-Tyszkiewicz et al., 2012). The first two items addressed dissatisfaction with weight/shape and muscle mass (e.g., "How satisfied are you with

your weight/shape?"), while the three remaining items assess dissatisfaction with the lower, middle, and upper body regions (e.g., "How satisfied are you with your waist and stomach?"). Responses were recorded using a 5-point Likert-type scale ranging from 1 (very happy) to 5 (very unhappy), and scores were calculated by summing responses across all items, with a higher score indicating a higher level body dissatisfaction.

Rosenberg Self-Esteem Scale

Self-esteem was measured using the Rosenberg Self-Esteem Scale (RSES; Rosenberg, 1965). The RSES is a 10-item scale used to assess global self-esteem. Participants rated items on a 4-point Likert-type scale (1= strongly disagree, 4 = strongly agree). Scores were calculated by summing responses across items, with higher scores indicating a higher sense of self-esteem. In a validation study with a sample of over 5,000 high school juniors and seniors, this measure was found to have strong test-retest reliability over a 2-week period, with Chronbach's alpha ranged from .77-.88 (Rosenberg, 1986).

Career Aspiration-Expectation Discrepancies

Consistent with previous research (Arbona & Novy, 1991; Metz et al., 2009), the following open-ended questions were asked of participants to capture career aspirations and expectations, respectively: "What occupation would you like to have as your lifetime career?" and "What occupation do you expect to have as your lifetime career?"

Occupational aspirations and expectations were coded according to Holland Code Types. Three-letter Holland codes for occupations reported by participants regarding career aspirations and expectations were identified using the Dictionary of Holland

Occupational Codes, 3rd Edition (Gottfredson & Holland, 1996). In cases where there was not an exact equivalent of the occupations listed by participants and occupations represented in the coding resource, the best approximation represented in the Dictionary of Holland Occupational Codes was used (see Appendix E). In cases where an adequate approximation was unavailable, participants were excluded from analysis in the study. Finally, there were numerous participants who listed either "entrepreneur/self-employed/business owner" or "researcher/scientist" as their occupational preference. Rather than eliminating these participants, the Self-Directed Search (SDS) Educational Opportunities Finder (Rosen, Holmberg, & Holland, 1997) was consulted to provide codes for these occupations (see Appendix E).

In order to examine career aspiration/expectation discrepancies, differences in the congruence and complexity of occupations were calculated. Congruence refers to the relatedness of an individual's career aspiration Holland type to that of their career expectation, while complexity refers to the cognitive skill and ability associated with an occupation (Brown & Gore, 1994; Holland, 1997; Gottfredson & Holland, 1996; Metz et al., 2009).

Congruence was calculated based on the C-Index, created by Brown and Gore (1994). The C-Index provides congruence scores from 0-18, with higher scores representing a greater level of congruence (i.e., less discrepancy). A score of 18 indicates no discrepancy between one's career aspiration and career expectation.

The Occupational Information Network (O*NET; www.onetonline.org), an online database dedicated to the world of work, was consulted to generate complexity scores. O*NET provides a Job Zone rating system that identifies the education, related

experience, and on-the-job training required for occupations. Job Zones range from 1 (little or no preparation required) to 5 (extensive preparation required). Discrepancies in complexity between career aspirations and career expectations were calculated by subtracting the Job Zone score for one's career expectation from their career aspiration. A score of zero indicated no difference in complexity between occupations, while a positive score indicated that the career aspiration was more complex than the career expectation; the opposite was true for a negative score.

There were two occupations listed numerous times by participants in which Job Zone scores were not available: "homemaker/stay-at-home-mom/housewife" and "entrepreneur/self-employed/business owner." In these cases, Job Zone scores were approximated. In the case of participants who listed "homemaker/stay-at-home-mom/housewife", the Job Zone score assigned to this occupation was "1", as there is no education, related experience, or on-the-job training required. For cases where participants listed "entrepreneur/self-employed/business owner," the United States Census Bureau's 2012 Survey of Business Owners was consulted, in which it was shown that the average education of over 22 million business owner respondents averaged a Job Zone score of 3.4. Because Job Zone scores are not continuous, this average was rounded up to a Job Zone score of "4" for these respondents.

Educational Aspirations

According to Gasser (2013), educational aspirations are typically measured by simply asking individuals what terminal degree they plan to obtain. Therefore, the following question will be asked to measure participants' educational aspiration: "How far do you plan to go in school?" Response options included "some high school,"

"graduated high school/GED," "some college," "associate's degree," "bachelor's degree," "master's degree," and "professional degree (e.g., M.D., Ph.D.)." Reponses were coded on a scale from 1-7, with higher scores indicating higher educational aspirations. Participants were also asked the current highest level of education completed using the aforementioned response options.

Perceived Career Barriers

The Career Barriers Inventory- Revised (CBI-R; Swanson & Tokar, 1991) is a 70-item instrument that measures an individual's anticipation of career barriers across 13 domains, the degree to which individuals believe a barrier might hinder their career progress, and the degree to which individuals have encountered career barriers in the past. The 13 domains or subscales include sex discrimination, lack of confidence, multiple-role conflict, conflict between children and career demands, racial discrimination, inadequate preparation, disapproval by significant others, decision-making difficulties, dissatisfaction with career, discouragement from choosing nontraditional careers, disability/ health concerns, job market constraints, and difficulties with networking/socialization (Swanson et al., 1996). Internal consistency for the 13 subscales ranges from .64 to .86, while correlations between scales range from .27 to .80 (Swanson et al., 1996). Swanson et al. (1996) also found that CBI-R results corresponded to expected group differences, for example, between men and women and between racial/ethnic majority and minority groups.

Participants rated the likelihood of encountering a given barrier on a 7-point Likert-style scale ranging from 1 (not at all likely to occur) to 7 (very likely to occur). Scores were calculated by summing responses across items to provide an overall

perceived barriers score, with higher scores indicating greater anticipation of barriers occurring.

In the absence of established instruments assessing perceived career barriers related to body weight/size, 9 items were added to the CBI-R to assess this construct. A previous study made similar adjustments to measure the impact of barriers not originally included in the CBI-R (Parnell et al. 2012). In keeping with this other study, the body weight subscale was created by rewording items related to race/ethnicity, gender, and ability status to those associated with body weight (see Body Weight/Size Subscale in Appendix B). Scores were calculated by summing responses across items, with higher scores indicating greater anticipation of barriers related to weight/size occurring.

RESULTS

There were 724 participants included for analysis in this study. Nonparametric correlation coefficients were calculated and presented in a table format for all of the variables included in this study (see Table 1). With regard to outcome and predictor variables of interest, examination of the distribution of scores identified issues that prohibited the use of the continuous forms of the variables (see Table 2). Over two-thirds of responses were represented in one value of the continuous form of Job Zone discrepancy score and Congruence (C-index) scores. Examination of skew, kurtosis, and histograms identified non-normality of educational aspirations, BMI, body dissatisfaction, self-esteem, and body weight/size barrier scores. Therefore, variables used in the analyses were recoded categorically in order to complete nonparametric statistics, which do not require normally distributed data.

Job Zone discrepancy was recoded into three categories: negative (scores of -4 through -1); same (score of 0); positive (scores of +1 through +4). There were 69.9% of respondents who reported perfect agreement between Job Zone scores of their career aspirations and career expectations (score = 0). There were 23.6% of respondents who reported positive scores (career aspirations were more complex than career expectations), and only 6.5% of respondents had a negative Job Zone discrepancy score (career aspirations were less complex than career expectations).

Congruence between career aspirations and career expectations was recoded into

Table 1: Nonparametric Correlation Coefficients

Variables			1	2	3	4	5	6	7	8	9	10	11	12	13
Kendall's tau_b	1. Job Zone Discrepancy	Correlation Coefficient	1.000	-.368**	-.122**	.041	.062*	.075**	.069*	-.064	-.001	.124**	.033	.012	-.059*
		Sig. (2-tailed)		.000	.000	.158	.036	.009	.030	.058	.972	.000	.331	.725	.049
		N	724	724	724	724	724	724	724	724	724	724	724	724	724
	2. Congruence	Correlation Coefficient	-.368**	1.000	.166**	-.068*	-.088**	-.039	-.038	-.005	-.003	-.159**	-.074*	.018	.053
		Sig. (2-tailed)	.000		.000	.015	.002	.164	.216	.886	.928	.000	.022	.576	.066
		N	724	724	724	724	724	724	724	724	724	724	724	724	724
	3. Educational Aspirations	Correlation Coefficient	-.122**	.166**	1.000	-.123**	-.079**	-.013	-.081**	.011	.019	-.163**	-.153**	-.023	.285**
		Sig. (2-tailed)	.000	.000		.000	.005	.635	.008	.744	.564	.000	.000	.472	.000
		N	724	724	724	724	724	724	724	724	724	724	724	724	724
	4. BMI	Correlation Coefficient	.041	-.068*	-.123**	1.000	.416**	.030	.170**	.042	-.036	.153**	.083**	.003	-.096**
		Sig. (2-tailed)	.158	.015	.000		.000	.234	.000	.155	.237	.000	.004	.918	.000
		N	724	724	724	724	724	724	724	724	724	724	724	724	724
	5. Body Dissatisfaction	Correlation Coefficient	.062*	-.088**	-.079**	.416**	1.000	.089**	.190**	-.018	-.054	.143**	.110**	-.015	-.054*
		Sig. (2-tailed)	.036	.002	.005	.000		.000	.000	.543	.081	.000	.000	.628	.042
		N	724	724	724	724	724	724	724	724	724	724	724	724	724
	6. Overall Perceived Career Barriers	Correlation Coefficient	.075**	-.039	-.013	.030	.089**	1.000	.568**	-.045	.009	.010	-.012	-.012	.041
		Sig. (2-tailed)	.009	.164	.635	.234	.000		.000	.124	.759	.689	.687	.673	.116
		N	724	724	724	724	724	724	724	724	724	724	724	724	724
	7. Weight/Size Perceived Career Barriers	Correlation Coefficient	.069*	-.038	-.081**	.170**	.190**	.568**	1.000	-.012	-.006	.061*	-.016	-.048	-.014
		Sig. (2-tailed)	.030	.216	.008	.000	.000	.000		.721	.851	.029	.612	.140	.633
		N	724	724	724	724	724	724	724	724	724	724	724	724	724
	8. Self-Esteem	Correlation Coefficient	-.064	-.005	.011	.042	-.018	-.045	-.012	1.000	-.005	.047	.019	.063	.046
		Sig. (2-tailed)	.058	.886	.744	.155	.543	.124	.721		.878	.116	.583	.069	.131
		N	724	724	724	724	724	724	724	724	724	724	724	724	724
	9. Gender Identity	Correlation Coefficient	-.001	-.003	.019	-.036	-.054	.009	-.006	-.005	1.000	-.058	.032	.134**	.006
		Sig. (2-tailed)	.972	.928	.564	.237	.081	.759	.851	.878		.062	.371	.000	.840
		N	724	724	724	724	724	724	724	724	724	724	724	724	724
	10. Age	Correlation Coefficient	.124**	-.159**	-.163**	.153**	.143**	.010	.061*	.047	-.058	1.000	.098**	.073*	-.041
		Sig. (2-tailed)	.000	.000	.000	.000	.000	.689	.029	.116	.062		.001	.015	.125
		N	724	724	724	724	724	724	724	724	724	724	724	724	724
	11. Race/Ethnicity	Cor on Coefficient	.033	-.074*	-.153**	.083**	.110**	-.012	-.016	.019	.032	.098**	1.000	.033	-.065*
		Sig. (2-tailed)	.331	.022	.000	.004	.000	.687	.612	.583	.371	.001		.338	.032
		N	724	724	724	724	724	724	724	724	724	724	724	724	724
	12. Sexual Orientation	Correlation Coefficient	.012	.018	-.023	.003	-.015	-.012	-.048	.063	.134**	.073*	.033	1.000	.023
		Sig. (2-tailed)	.725	.576	.472	.918	.628	.673	.140	.069	.000	.015	.338		.448
		N	724	724	724	724	724	724	724	724	724	724	724	724	724
	13. SES	Correlation Coefficient	-.059*	.053	.285**	-.096**	-.054*	.041	-.014	.046	.006	-.041	-.065*	.023	1.000
		Sig. (2-tailed)	.049	.066	.000	.000	.042	.116	.633	.131	.840	.125	.032	.448	
		N	724	724	724	724	724	724	724	724	724	724	724	724	724

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Table 2: Measures of Central Tendency

Variable	*N*	Range	Min	Max	Mean	St. Dev.
Job Zone discrepancy	724	8	-4	4	0.34	1.07
Congruence	724	18	0	18	14.68	4.83
Educational aspirations	724	5	2	7	5.26	1.25
BMI	724	60.32	9.4	69.72	27.085	7.64
Body dissatisfaction	724	20	5	25	16.83	5.54
Self esteem	724	28	12	40	29.11	5.86
Perceived career barriers, excluding weight	724	420	81	501	316.61	75.45
Perceived career barriers, weight/size	724	54	9	63	37.18	16.67

two categories based on the majority of scores being in complete agreement between career aspirations and career expectations. Categories included not perfect congruence (scores 0 through 17) and perfect congruence (scores of 18). A perfect congruence score (score = 18) between career aspirations and expectations was reported for 60.1% of respondents, while 39.9% had not perfect congruence between career aspirations and expectations (scores of 0-17).

Educational aspirations was recoded into four categories: less than a 4 year college degree; Bachelor's degree; Master's degree; professional degree. No participants aspired to acquire less than a high school diploma. Educational aspirations of participants were distributed as follows: 3.2% of participants aspired to a high school diploma or GED, 7.3% to some college, 11.3% to an Associate's degree, 32.2% to a Bachelor's degree, 30.1% to a Master's degree, and 15.9% to a professional degree.

BMI was recoded into four categories according to the CDC's classification system (CDC, 2014): underweight (BMI less than 18.5); normal weight (BMI 18.5 – 24.9); overweight (BMI 25-29.9); obese (BMI 30 or higher). BMI scores of participants

were distributed as follows: 5.5% of respondents had a BMI considered underweight (<18.5), 41.7% of respondents had BMI considered normal weight (18.5-24.9), 24.2% were in the overweight category (25- 29.9), and 28.5% were in the obese category (30 or greater), which is consistent with national trends of BMI according to the National Health and Nutrition Examination Survey (NHANES; 2003).

Body dissatisfaction was recoded into three categories based on distribution of scores: less than 16; 16 – 20; and greater than 20. Body dissatisfaction scores were distributed as follows: 36.2% of participants had body dissatisfaction scores less than 16, 36.3% had scores from 16–20, and 27.5% had scores from 21–25.

Self esteem was recoded into three categories based on distribution of scores: low (0-21), average (22-31), and high (32-40). Self-esteem scores were distributed as follows: 10.6% of participants had low self-esteem scores, 56.8% had average self-esteem, scores, and 32.6% had high self-esteem scores.

Weight/size perceived career barriers was recoded into four categories based on distribution of scores: less than 25 (24.7%), 25 – 39 (25.1%); 40 – 50 (24.7%), and greater than 50 (25.5%). The overall perceived carrier barriers variable excluded weight/size barriers and was recoded into four categories based on distribution of scores: less than 280 (25.1%), 280 – 322 (24.6%), 323 – 369 (24.9%), and 370 and greater (25.4%).

Research Question 1

Chi-square analysis was conducted to examine the distribution of body dissatisfaction scores for the four categories of educational aspirations of respondents (see Table 3). Results revealed that knowing a respondent's body dissatisfaction score

Table 3: Chi-Squared Body Dissatisfaction and Educational Aspirations

	Body Dissatisfaction Score		
	<16	16 - 20	>20
< 4 year degree	33.50%	32.30%	34.20%
4 year degree	32.60%	39.10%	28.30%
master's degree	39.40%	34.90%	25.70%
professional degree	40.90%	39.10%	20.00%
Total	36.20%	36.30%	27.50%

X^2 (6, N=724) = -0.076, p= 0.12
r_s[6] = .-0.080, p= .012

category improved prediction of their educational aspirations by 7.6%; however, results were not statistically significant, X^2 (6, N=724) = -0.076, p=0.12. A Kendall's Tau-b correlation was run to determine the relationship between the two ordinal transformations for body dissatisfaction and educational aspirations.

Kendall's Tau was chosen over the more commonly used Spearman's rho rank correlation because it is more robust than Spearman's rho (Statistical Solutions, 2016). Results revealed a statistically significant inverse relationship between body dissatisfaction and level of education to which respondents aspire, τ [6] = -0.080, p = .012. As defined by Cohen (1988) the effect size of the relationship (-0.08) was medium. Respondents who aspired to less than a 4 year degree were more likely than those with higher educational aspirations to have a body dissatisfaction score greater than 20. Conversely, respondents who aspired to obtain professional degrees were more likely to have lower body dissatisfaction scores (less than 16) than respondents with lower educational aspirations. These findings were consistent with the hypothesis presented for this research question that higher levels of body dissatisfaction would result in lower

educational aspirations.

Research Question 2

In order to examine this research question, body dissatisfaction and Job Zone discrepancy scores between one's career aspiration and career expectations were analyzed. Chi-squared analysis revealed that knowing a respondent's body dissatisfaction score category improved prediction of their Job Zone score category (negative, same, positive) by 8.6%, X^2 (4, N=724) = 0.086, p=0.04 (see Table 4). Results were statistically significant at p <.05.

A Kendall's Tau-b correlation was run to determine the relationship between the two ordinal transformations for body dissatisfaction and Job Zone discrepancy score categories. As described with the first research question, Kendall's Tau was chosen over the more commonly used Spearman's rho rank correlation because it is more robust than Spearman's rho (Statistical Solutions, 2016). Results revealed a statistically significant positive relationship between body dissatisfaction and Job Zone discrepancy score category, $\tau[4,724] = .071$, $p = .04$, indicating that participants with higher levels of body dissatisfaction made larger compromises between their career aspirations and career expectations. As defined by Cohen (1988) the effect size of the relationship (.071) was medium. Participants in the positive Job Zone score category (career aspirations were more complex than career expectations) were more likely to have a body dissatisfaction score that was greater than 20, than participants with Job Zone scores in the negative and same categories. These findings supported the hypothesis presented for this research question.

Table 4: Chi-Squared Body Dissatisfaction and Complexity

	Body Dissatisfaction Score		
	<16	16 - 20	>20
Negative JZ Discrepancy	27.70%	48.90%	23.40%
Same JZ Discrepancy	38.30%	37.40%	24.30%
Positive JZ Discrepancy	32.20%	29.80%	38.00%
Total	36.20%	36.30%	27.50%

X^2 (4, N=724) = 0.09, p= 0.04
r_s[4,724] = .071, p= .04

Research Question 3

In order to investigate this research question, three separate regression equations were analyzed with outcome variables of complexity/Job Zone discrepancy score, congruence, and educational aspirations.

Complexity

An ordinal regression was run to assess the relationship between the outcome variable Job Zone discrepancy score category (4 categories) with indicator variables of body dissatisfaction (3 categories), BMI (4 categories), and weight/size perceived career barriers (4 categories). Assumptions of ordinal regression include the following: 1) the dependent variable is measured at the ordinal scale of measurement; 2) the independent variables must be nominal or continuous (interval or ratio); 3) the set of variables must exhibit no multicollinearity; and 4) the assumption of proportional odds must be met indicating similar effect of the independent variable across different levels of the dependent variable.

The results should be interpreted with caution given the following data issues: 1) 24.1% of the cell combinations (i.e., dependent variable levels by combinations of the

predictor variable levels) had zero frequencies; 2) relatively small cell sample sizes (e.g., participants with a BMI <18.5); and potential issues with multicollinearity.

The model fit chi-square test indicated at least one of the predictors had a regression coefficient (slope) that was not equal to zero and suggested the model (-2 Log Likelihood = 260.88) had a marginally significantly improved prediction than the intercept only model (-2 Log Likelihood = 267.64), $\chi^2(8)= 15.77$, $p=.05$. The non-significant goodness of fit test result indicated the proposed model of variables fit the observed data (i.e., the observed data did not significantly differ from the model predictions), $\chi^2(84)= 104.49$, $p=.064$. Nagelkerke's pseudo R^2 (.595) indicated that the model demonstrates a moderate collective effect size of the prediction of Job Zone discrepancy scores. The test of parallel lines chi-square was nonsignificant, indicating the assumption of proportional odds was violated, $\chi^2(8)= 4.92$, $p=.766$. Therefore, results of the analysis should be interpreted with caution.

The results indicated that moderate body dissatisfaction significantly predicted Job Zone discrepancy scores given the other predictors in the model, Wald $\chi^2(1)= 8.29$, $p=.016$. An odds ratio (OR) is the ratio of the odds for an outcome for one group and the odds of an outcome for a reference group. An OR equal to one indicates equal odds between the two groups whereas an OR less than one indicates the group has lower odds than the reference group, and an OR greater than one indicates the group has higher odds than the reference group. The odds of a respondent with a moderate body dissatisfaction score having a negative Job Zone discrepancy (career expectation was more complex than career aspiration) score was 0.53 times that of a respondent with a body dissatisfaction score in the high category, suggesting that those with high levels of body

dissatisfaction were more likely to report career expectations that were more complex than their career aspirations (see Table 5). Thus, the hypothesis for this question was not supported. Further, weight/size-related perceived career barriers did not significantly contribute to the model.

Congruence

A logistic regression was run to assess the relationship between the outcome variable congruence (2 categories, perfect and less than perfect), and relatedness of an individual's career aspiration Holland type to that of their career expectation, with indicator variables of body dissatisfaction (3 categories), BMI (4 categories), and weight-related perceived career barriers (4 categories).

Results indicated the overall model significantly predicted congruence scores, χ^2 (8)= 17.32, *p*=.027. Nagelkerke's pseudo R^2 (.032) indicated that the model demonstrates a small collective effect size in the prediction of congruence scores. Body dissatisfaction appears to be driving the predictive power of the model given that it was the sole significant predictor. Body dissatisfaction, overall, significantly predicted congruence between career aspirations and career expectations, Wald χ^2 (2)= 6.499, *p*=.039 (see Table 6). However, these results should be interpreted with caution. While overall predictive accuracy of the model was 60.3%, correct classification for those with nonperfect congruence (score <18) was only 18.2% while predictive accuracy for those with perfect career congruence scores was 88.3%. This was likely due to the majority of respondents (60.1%) having perfect congruence scores. Thus, the hypothesis was partially supported, given that body dissatisfaction was the only significant predictor in the model.

Table 5: Significant Predictors of Complexity

Predictor	β	SE β	Wald's χ2	df	ρ	95% Confidence Interval		*eβ* (OR)
Body Dissatisfaction (medium)	-0.634	0.22	8.288	1	0.004	-1.07	-0.20	0.53

Model Assessment
Overall model evaluation
-2 Log Likelihood: $\chi^2(8)= 15.77$, $p=.05$
Test of Parallel lines: $\chi2(8)= 4.92$, $p=.766$
Nagelkerke's pseudo $R^2 =.595$
Goodness of Fit: $\chi2(84)= 104.49$, $p=.064$

Educational Aspirations

An ordinal regression was run to assess the relationship between the outcome variable educational aspirations (4 categories) with indicator variables of body dissatisfaction (3 categories), BMI (4 categories), and weight/size perceived career barriers (4 categories).

The results should be interpreted with caution given the following data issues: 1) 19.1% of the cell combinations (i.e., dependent variable levels by combinations of the predictor variable levels) had zero frequencies; 2) relatively small cell sample sizes (e.g., participants with a BMI <18.5); and potential issues with multicollinearity.

The model fit chi-square test indicated that at least one of the predictors had a regression coefficient (slope) that was not equal to zero and suggested the model (-2 Log Likelihood = 437.31) had a significantly improved prediction than the intercept only model (-2 Log Likelihood = 459.75), $\chi^2(8)= 22.41$, $p=.004$. The significant goodness of fit test result indicated that the proposed model of variables did not fit the observed data

Table 6: Significant Predictors of Congruence

Predictor	β	SE β	Wald's χ2	df	ρ	95% Confidence Interval		*eβ* (OR)
Constant	-0.189	0.193	0.958	1	0.328			0.828
Body Dissatisfaction, overall			6.499	2	0.039			
Body Dissatisfaction, low	0.49	0.233	4.433	1	0.035	1.034	1.632	2.574
Body Dissatisfaction, medium	0.503	0.207	5.892	1	0.015	1.102	1.654	2.483

Model Assessment
Overall model evaluation
-2 Log Likelihood: $\chi 2$ (8)= 17.32, *p*=.027
Nagelkerke's pseudo R^2 =.032
Goodness of Fit: Wald $\chi 2$ (2)= 6.499, *p*=.039

(i.e., the observed data differed significantly from the model predictions), $\chi^2(130)$= 159.73, *p*=.039; therefore, results should be interpreted with caution. Nagelkerke's pseudo R^2 (.033) indicated that the model demonstrated a moderate collective effect size in the prediction of educational aspirations. The test of parallel lines chi-square was non-significant indicating the assumption of proportional odds was violated, $\chi^2(16)$= 14.78, *p*=.541. Therefore, results of the analysis should be interpreted with caution.

The results indicated that the predictors for underweight and normal BMI significantly predicted educational aspirations given the other predictors in the model, Wald $\chi^2(1)$= 8.29, *p*=.016 (see Table 7). The odds of a respondent with a BMI in the underweight category being in a higher educational aspiration category were 2.09 larger than for respondents with a BMI in the obese category. Likewise, the odds of a respondent with a normal BMI being in a higher educational aspiration category were 1.79 larger than for a respondent with a BMI in the obese category. The OR for those in

Table 7: Significant Predictors of Educational Aspirations

Predictor	β	SE β	Wald's χ2	df	ρ	95% Confidence Interval		*eβ* (OR)
BMI, normal weight	0.741	0.336	4.855	1	0.028	0.082	1.4	2.098
BMI, overweight	0.583	0.195	8.967	1	0.003	0.202	0.965	1.7914

Model Assessment

Overall model evaluation: $\chi2$ (8)= 17.32, p=.027

-2 Log Likelihood: $\chi2$(8)= 22.41, p=.004

Test of Parallel Lines: $\chi2$(16)= 14.78, p=.541

Nagelkerke's pseudo R^2 =.033

Goodness of Fit: $\chi2$(130)= 159.73, p=.039

the overweight category were not statistically different from those in the obese category (p=.19). Therefore, while the hypothesis for this research question was not supported, as neither body dissatisfaction nor weight/size perceived career barriers significantly predicted one's educational aspirations, there were important associations between BMI and educational aspirations.

Research Question 4

Do body dissatisfaction, BMI, and weight/size perceived career barriers impact career aspiration/expectation discrepancies and educational aspirations over and above self-esteem and overall perceived career barriers? Similar to Research Question 3, three separate regression equations were analyzed with outcome variables of Job Zone discrepancy score, congruence, and educational aspirations.

Complexity

To examine whether body dissatisfaction, BMI, self-esteem, overall perceived career barriers, and weight/size perceived career barriers predict career aspiration/expectation discrepancies, an ordinal regression analysis was conducted.

The results should be interpreted with caution given the following data issues: 1) 55.8% of the cell combinations (i.e., dependent variable levels by combinations of the predictor variable levels) had zero frequencies; 2) relatively small cell sample sizes (e.g., participants with a BMI <18.5; participants with low self-esteem); and potential issues with multicollinearity.

The model fit chi-square test indicated that at least one of the predictors had a regression coefficient that was not equal to zero and suggested the model (-2 Log Likelihood=665.721) did not significantly improve prediction over the intercept only model (-2 Log Likelihood=687.148), $\chi^2(13)= 21.43$, $p=.065$. The nonsignificant goodness of fit test result indicated the proposed model of variables fits the observed data (i.e., the observed data do not significantly differ from the model predictions), $\chi^2(491)= 456.58$, $p=.85$. Nagelkerke's pseudo R^2 (.038) indicated that the model demonstrated a small collective effect size in the prediction of Job Zone discrepancy score categories. The test of parallel lines chi-square was nonsignificant, indicating the assumption of proportional odds was not violated, $\chi^2(13)= 652.47$, $p=.429$ (see Table 8).

The results indicated that the predictor for low self-esteem significantly predicted Job Zone score discrepancies given the other predictors in the model, Wald $\chi^2 (1)= 4.18$, $p=.041$. Specifically, the odds of reporting Job Zone scores in the negative category for those with low levels of self-esteem was 1.77 the odds of those with high levels self-

Table 8: Significant Predictors of Complexity, Including Self-Esteem and Overall Perceived Career Barriers

Predictor	β	SE β	Wald's χ2	df	ρ	95% Confidence Interval		*eβ* (OR)
Body Dissatisfaction, low	-0.65	0.22	8.737	1	0.003	-1.08	-0.219	0.522
Self-Esteem, low	0.572	0.28	4.18	1	0.041	0.024	1.121	1.7718

Model Assessment

Overall model evaluation

-2 Log Likelihood: $\chi2(10)= 21.15$, $p=.02$

Test of Parallel lines: $\chi2(10)= 12.78$, $p=.236$

Nagelkerke's pseudo $R^2 =.037$

Goodness of Fit: $\chi2(222))= 230.37$, $p=.336$

esteem, controlling for other predictors in the model. Thus, the lower a person's self-esteem, the more likely they will report a negative discrepancy (i.e., career aspiration is less complex than career expectation) in their Job Zone score. Additionally, moderate body dissatisfaction significantly predicted Job Zone discrepancy scores given the other predictors in the model, Wald $\chi^2 (1)= 8.36$, OR=.528, $p=.004$. Specifically, the odds of those with moderate levels of body dissatisfaction reporting positive Job Zone discrepancies (i.e., career aspirations are more complex than career expectations) was 0.53 the odds of those with higher body dissatisfaction, controlling for the other predictors in the model. That is, the higher one's body dissatisfaction score, the more likely they will report a negative Job Zone discrepancy score (i.e., career expectations are more complex than career aspirations). These results were inconsistent with the hypothesis presented for this research question.

Congruence

To examine whether body dissatisfaction, BMI, self-esteem, overall perceived career barriers, and weight/size perceived career barriers predicted congruence scores, a logistic regression analysis was conducted.

Results indicated the overall model significantly predicted congruence, χ^2 (13)= 30.35, *p*=.004. Nagelkerke's pseudo R^2 (.056) indicated that the model demonstrated a small collective effect size in the prediction of congruence. Self-Esteem and body dissatisfaction both, overall, significantly predicted congruence in the model Wald χ^2 (2)= 7.51, *p*=.023; Wald χ^2 (2)= 6.76, *p*=.034, respectively. Controlling for other factors in the model, compared to those with the highest scores for body dissatisfaction, a person with low and moderate body dissatisfaction scores is more likely to report perfect congruence scores Wald χ^2 (1)= 4.32, *p*=.038; Wald χ^2 (1)= 6.29, *p*=.012, respectively. Specifically, the odds of reporting perfect career aspiration/expectation congruence for those with low levels of body dissatisfaction are 1.63 the odds of those with higher body dissatisfaction. For those with moderate body dissatisfaction, the odds are 1.69 the odds of those with higher body dissatisfaction. In regards to self-esteem, moderate self-esteem scores significantly predicted career aspiration and expectation congruence Wald χ^2 (1)= 7.51, *p*=.023 (see Table 9). Thus, for those with moderate self-esteem, the odds of having perfect career aspiration/expectation congruence is 1.35 the odds of those with high self-esteem scores.

These results should be interpreted with caution. While the overall predictive accuracy of the model was 62.1%, correct classification for those with less than perfect congruence (score <18) was only 25.9%, while predictive accuracy for those with perfect

Table 9: Significant Predictors of Congruence, Including Self-Esteem and Overall Perceived Career Barriers

Predictor	β	SE β	Wald's χ2	df	ρ	95% Confidence Interval		*eβ* (OR)
Constant	-0.292	0.242	1.453	1	0.228			0.747
Self-Esteem, overall			7.513	2	0.023			
Self-Esteem, medium	0.305	0.171	3.166	1	0.075	0.97	1.898	1.356
Body Dissatisfaction, overall			6.755	2	0.034			
Body Dissatisfaction, low	0.489	0.235	4.32	1	0.038	1.63	1.028	2.585
Body Dissatisfaction, medium	0.526	0.21	6.291	1	0.012	1.692	1.122	2.552

Model Assessment
Overall model evaluation: $\chi2$ (9)= 21.46, *p*=.011
Nagelkerke's pseudo R^2 =.040
Goodness of Fit: Wald $\chi2$ (1)= 4.46, *p*=.035

career congruence scores (score=18) was 86.2%. This was likely due to the preponderance of respondents (60.1%) having perfect congruence scores. These results partially supported the hypothesis presented in this research question, as body dissatisfaction did contribute significantly to the model; however, self-esteem also significantly predicted the outcome variable in the model. Weight/size related perceived barriers were not found to be significantly predictive of discrepancies in congruence scores between career aspirations and career expectations.

Educational Aspirations

To examine whether body dissatisfaction, BMI, self-esteem, and perceived career barriers (unrelated to weight) predicted educational aspirations, an ordinal regression analysis was conducted. Assumptions of ordinal regression, as previously stated, were assessed.

The results should be interpreted with caution given the following data issues: 1)

55.8% of the cell combinations (i.e., dependent variable levels by combinations of the predictor variable levels) had zero frequencies; 2) relatively small cell sample sizes (e.g., participants with a BMI <18.5; participants with low self-esteem); and potential issues with multicollinearity.

The model fit chi-square test indicated at least one of the predictors has a regression coefficient that was not equal to zero and suggests the model (-2 Log Likelihood=1208.99) had significantly improved prediction compared to the intercept only model (-2 Log Likelihood=1181.96), $\chi^2(13)= 26.14$, p=.012. The nonsignificant goodness of fit test result indicated the proposed model of variables fits the observed data (i.e., the observed data do not significantly differ from the model predictions), $\chi^2(249)= 250.54$, p=.461. Nagelkerke's pseudo R^2 (.04) indicated that the model demonstrated a small collective effect size in the prediction of educational aspirations. The test of parallel lines chi-square was nonsignificant, indicating that the assumption of proportional odds was not violated, $\chi^2(26)= 25.28$, p=.503 (see Table 10).

The results indicated that a BMI considered underweight (Wald χ^2 (1)= 4.68, OR=.2.08, p=.031) or normal weight (Wald χ^2 (1)= 7.71, OR=1.73 p=.005) significantly predicted educational aspirations given the other predictors in the model. Specifically, the odds of reporting higher educational aspirations for those classified as underweight or normal weight were, respectively, 2.08 and 1.73 the odds of those classified as obese, controlling for other predictors in the model. Results showed that the lower a person's BMI, the greater the odds of higher educational aspirations. The results indicated that low levels of weight/size perceived career barriers significantly predicted educational aspirations given the other predictors in the model, Wald χ^2 (1)= 4.16, OR=1.72 p=.041.

Table 10: Significant Predictors of Educational Aspirations, Including Self-Esteem and Overall Perceived Career Barriers

Predictor	β	SE β	Wald's χ2	df	ρ	95% Confidence Interval		*eβ* (OR)
BMI, underweight	0.748	0.335	4.97	1	0.026	0.09	1.405	2.1128
BMI, normal weight	0.626	0.193	10.544	1	0.001	0.248	1.004	1.8701

Model Assessment
Overall model evaluation
-2 Log Likelihood: $\chi2(9)= 26.14$, $p=.002$
Test of Parallel lines: $\chi2(18)= 14.19$, $p=.717$
Nagelkerke's pseudo $R^2 =.038$
Goodness of Fit: $\chi2(249)= 250.54$, $p=.461$

Specifically, the odds of reporting higher educational aspirations for those low weight/size perceived career barriers were 1.72 the odds of those with high levels of weight/size perceived career barriers, controlling for other predictors in the model. Thus, the lower a person's weight/size-related perceived career barriers, the more likely they will report higher educational aspirations. The findings from this analysis partially supported the hypothesis, as weight/size perceived career barriers significantly predicted educational aspirations; however, BMI was more predictive of educational aspirations than body dissatisfaction.

DISCUSSION

Summary of Findings

This study sought to explore the impact of women's body dissatisfaction on their career aspirations and expectations, educational aspirations, and perceived career barriers in order to fill gaps in the existent literature. There were a number of significant findings in this study that suggest that body dissatisfaction may play a significant role in one's career and educational pursuits; however, it is important to note that these results should be interpreted with caution given violations of normality observed in the data.

Career Aspiration and Expectation Complexity

The relationship of women's body dissatisfaction on their career expectations was explored by examining the relationship of body dissatisfaction with discrepancies between the complexity of women's career aspirations and expectations (i.e., Job Zone scores). To test the hypothesis, a Kendall's Tau-b correlation was conducted, revealing a significant positive relationship between body dissatisfaction and discrepancies in women's career aspirations and expectations. More simply, the higher one's body dissatisfaction, the more likely they were to report having career expectations that were less complex than their career aspirations. Thus, the results suggest that body dissatisfaction may significantly impact one's career decisions. These findings build upon the current literature that finds women who are dissatisfied with their physical appearance make significant changes in their daily lives, such as avoiding job interviews or

withholding their opinions, as a result of concern over their looks (Etcoff et al., 2005).

Ordinal regression analyses were conducted to explore the relationships of body dissatisfaction, BMI, and weight/size perceived career variables to career aspiration/expectation complexity discrepancies. With regard to career aspiration/expectation complexity discrepancies, results showed that moderate body dissatisfaction scores were significantly related to individuals reporting more complex career expectations than career aspirations, when controlling for BMI. Similarly, additional ordinal regression analyses including self-esteem and overall perceived career barriers showed that higher levels of body dissatisfaction were significantly predictive of negative Job Zone discrepancy scores. That is, the higher one's body dissatisfaction, the more likely their career expectations exceeded their career aspirations. In addition, low self-esteem was also related to higher career expectations than career aspirations. While these findings were unexpected, there may be an explanation for these results. Glass et al. (2010) explain that heavier women and men are less likely to marry, at least earlier in life, than nonheavy peers. Consequently, these individuals may experience greater career achievement in the early stages of their careers as a result of delaying family formation (Averett & Korenman 1996; Conley & Glauber 2005; Gortmaker et al., 1993). This makes sense, as individuals with greater body dissatisfaction may work to find ways to improve how they feel about themselves. One of these ways may be through career achievement. Ultimately, further research is needed in order to be more certain of the underlying processes driving the current findings.

Career Aspiration and Expectation Congruence

Logistic regression analysis was used to examine the relationship of body dissatisfaction, BMI, and weight/size perceived career barriers on the congruence between career aspirations and career expectations. Body dissatisfaction was the sole significant predictor in this regression model, suggesting that as body dissatisfaction increases, participants are more likely to have career expectations that are less congruent with their career aspirations than for individuals with lower body dissatisfaction scores. Again, this finding should be interpreted with caution given some of the issues with the data; however, this result does provide some evidence that body dissatisfaction may have significant implications on one's career planning. In addition, high body dissatisfaction was significantly associated with lower congruence between career aspirations and expectation when self-esteem and overall perceived career barriers were added to the model; however, moderate self-esteem scores also predicted such incongruence. These findings suggest that both body dissatisfaction and self-esteem may play important roles in how one thinks about their career. Additional research investigating the unique contributions of both body dissatisfaction and self-esteem to the congruence of one's career aspirations and expectations would be valuable in increasing our understanding of how these concepts impact career planning.

Educational Aspirations

A Kendall's Tau-b correlation was conducted to assess the relationship of body dissatisfaction and educational aspirations. Results illustrated a significant inverse relationship between body dissatisfaction and educational aspirations. That is, without controlling for other factors, it appears that higher levels of body dissatisfaction are

associated with decreases in women's educational pursuits. Research exists regarding the role of weight and BMI on educational attainment (Cohen et al., 2013; Glass et al., 2010; McLaren, 2007; Ogden et al., 2010), illustrating an inverse relationship between obesity and educational attainment, which are consistent with the results of this study. However, to my knowledge, there is no available literature specifically exploring the role of body dissatisfaction on educational aspirations. Therefore, these findings are important for furthering our knowledge of the role of body dissatisfaction in women's lives.

Additional ordinal regression analyses illustrated that educational aspirations were significantly predicted by BMI over and above body dissatisfaction, self-esteem, and overall perceived career barriers. In addition, lower body weight/size perceived career barriers predicted higher educational aspirations than participants who reported high levels of weight/size perceived career barriers. Results observed suggest that women with underweight and normal weight BMIs, as well as lower levels of body weight/size perceived career barriers have higher educational aspirations than women who are classified in the overweight and obese categories. While this finding was inconsistent with some of the hypotheses presented in this study, it is valuable in adding to our understanding of the relationship between body size and educational plans, and suggests that BMI may play a more important predictive role in educational aspirations than body dissatisfaction.

Implications of Findings

There were a number of interesting findings in this study. Perhaps most compelling are the relationships observed between women's body dissatisfaction, BMI, and career and educational pursuits. While additional research is necessary to identify the

specific ways in which the variables in this study interact with each other, the results suggest that there are serious implications for women with high body dissatisfaction and high BMIs.

The findings of this study suggest that women with higher BMIs and rates of body dissatisfaction may aspire to achieve less education and make some compromises in their career aspirations and expectations. Over time, this could result in many women with a number of unique skills, knowledge, and perspectives being excluded from the workforce. Etcoff et al. (2005) noted that women may disengage and withdraw from various daily life activities such as sharing their opinions, which speaks to this issue. Because women with higher body dissatisfaction and BMIs might pursue less education, they may be barred from high-power positions due to degree requirements. Thus, on a larger social platform, we are potentially missing out the unique capabilities of such women.

Fortunately, there are ways to begin addressing issues of body dissatisfaction in women. Young women could benefit greatly from interventions designed specifically to address body dissatisfaction and build body acceptance from an early age. This could manifest through school and career counselors talking with girls about their feelings towards their bodies and how this impacts their career and educational aspirations. Workshops and programming designed to educate women about unrealistic beauty ideals and the potential psychological implications of these ideals could be implemented within schools or at the community level. Similarly, nonprofit organizations dedicated to sending messages of body acceptance and positivity may be influential in helping women feel confident regardless of their BMI or body size. It is important to note that the onus

for change should not be reserved only for women. Interventions aimed at targeting men and boy's views on women and physical attractiveness will be an important aspect of creating a more inclusive and accepting society. As discussed earlier in this study, the HAES movement emphasizes health and self-compassion rather than focusing on body weight/size. HAES offers and endorses programs designed to improve body appreciation throughout the United States, which may serve as a beneficial launching point for designing interventions to work with young women and men (Healthy At Every Size, n.d.). One study observed that individuals who participated in a HAES-oriented exercise program had high retention and more adherences to the program than exercise-only participants, illustrating the benefits of HAES programs (Hsu, Buckworth, Focht, & O'Connell, 2013).

On a larger scale, influential advertisers and media sources challenging Western beauty ideals may be crucial in creating new beauty standards. Fortunately, there have been campaigns aimed at reducing body dissatisfaction and improving overall body image for women in recent years. For example, in 2004, The Dove Campaign for Real Beauty was launched, which coupled research on women's body image and self-esteem around the globe (Etcoff et al., 2005) with powerful advertisements of women with diverse body sizes. This campaign was aimed at challenging media portrayals of the thin ideal, and continues to this day. Similarly, in recent years, a Body Positivity Movement has formed in which there are a number of online web forums dedicated to increasing affirmative attitudes and compassion towards one's body. There is some early evidence that suggests these campaigns are having real impacts on Western beauty ideals. For example, international fashion brands such as Calvin Klein and popular magazines are

starting to feature "plus-sized" models in their publications. Ultimately, it is campaigns like these that will begin to alter the system that perpetuates unrealistic beauty ideals.

Limitations and Directions for Future Research

While the current study helps to start filling gaps in the literature on the relationship between women's body dissatisfaction, career aspirations and expectations, and educational aspirations, there were limitations to this study that are important to acknowledge.

The cross-sectional design limits this study in a variety of ways. First, because this study examines body dissatisfaction, career aspirations and expectations, and educational aspirations at one point in time, the long-term relationship of these variables with each other are unknown. For example, while higher body dissatisfaction was significantly associated with lower educational aspirations for participants at the time at which they completed this survey, only a longitudinal design would provide greater information on if this association remains true throughout one's lifetime. In addition, body dissatisfaction may or may not have been experienced by participants at the time of this study, but could have been experienced in the past, or conversely, in the future. Some research indicates that body dissatisfaction grows for women during midlife (McLaren & Kuh, 2004), which may have significant impacts on their career and/or educational plans. Ideally, future studies would follow a longitudinal design in which greater understanding of the long-term effects of body dissatisfaction on career decision-making and educational pursuits.

Another limitation of this study was that participants self-selected to complete the online survey. This may have resulted in a self-selection bias; therefore, generalizability

of this study is limited. Further, since this study was open for any female who was currently a U.S. citizen and over the age of 18, some participants may not have been in the career planning stage of life. That is, they may have already made a career decision and thus, had no discrepancies to report on their career aspirations and expectations. This may explain why a majority of participants reported no differences in their career aspirations and expectations. There were, however, advantages in using this design with regard to educational aspirations. That is, because a college sample was not recruited in this study, which is common for research of this nature, we did not restrict the range of the educational aspirations variable. Had a college sample been recruited, it would have been likely that the lowest educational aspiration of participants was at least a Bachelor's degree or 4-year degree. Future studies would benefit from recruiting participants who are not only outside of college, but also early in the career planning stages, such as high school students.

Next, the majority of participants in this study were White, cisgender, heterosexual women. Therefore, generalizing these results to all women should be done with caution. While the research does support that body dissatisfaction is something that affects most women, including women of various ethnic backgrounds and ages (Etcoff et al., 2005; Swami et al., 2010), further research is needed to generalize the specific relationships of body dissatisfaction with career aspirations and expectations and educational aspirations across these groups. Consequently, future research should examine the impact of body dissatisfaction on career and educational aspirations among diverse groups of women in order to better understand differences between such groups.

Because research tends to indicate that body dissatisfaction is particularly

significant in the lives of women, women were the focus of this study. However, this does not mean that men do not experience body dissatisfaction. Research in recent decades has consistently indicated that body image and body dissatisfaction concerns are significant issues for men (Burlew & Shurtz, 2013; Lavender & Anderson, 2010), and approximately 10-15% of eating disorder diagnoses are ascribed to men (Carlat, Camargo, & Herzog, 1997). This number may underestimate the true rates of eating disorders in men, as research related to men's body image concerns are underrepresented in the literature. Therefore, it is imperative that future research continues to explore how body image and body dissatisfaction impact the lives of men across the globe.

Another important limitation of this study was related to the resources used to code occupations in this study. While Holland is considered one of the most significant contributors to psychological career research, the coding resources have not been updated for many years. The primary, and to my knowledge, most recent coding resource pulling from Holland's three-letter code types (used in this study) was the Dictionary of Holland Occupational Codes, 3rd Edition (Gottfredson & Holland, 1996). While this resource provided approximately 750 pages worth of occupational codes, it fails to account for the advances in technology that have led to the creation of numerous new occupations in the past two decades. Research related to careers and occupations would greatly benefit from updates to these coding resources in order to accurately reflect the current labor market.

Finally, in some cases, negative job zone discrepancy scores may have been a result of participants prioritizing practicality. For example, some participants noted that they aspired to be an "actress" (Job Zone =2), but they expected to be a "manager" (Job Zone=4). In this example, being a manager may be viewed as more realistic. Thus,

investigating how practicality influences one's career aspirations and expectations would be helpful in future studies.

CONCLUSION

Women's body dissatisfaction is a significant issue across the lifespan and the globe (Etcoff et al., 2005; Swami et al., 2010). While some movements for increased body positivity have arisen in recent years, unrealistic beauty standards continue to dominate Western cultures, resulting in a "normative" experience of body dissatisfaction throughout women's lives (Calagero et al., 2007; Rodin et al., 1984; Smolak, 2006). Such body dissatisfaction has serious implications for women's wellbeing both physically and psychologically (Etcoff et al., 2005; Neumark-Sztainer et al., 2006; Stice et al., 2011; WHO, 2000). The current study acts as a starting point to begin the important process of exploring the impact of body dissatisfaction on women's career and educational pursuits, as little attention has been dedicated to this topic in the past. Given increasing globalization, it is likely that body dissatisfaction will continue to rise internationally (Becker, 2004), highlighting the need for increased dedication to understanding the numerous ways in which body dissatisfaction impacts women's lives everyday.

APPENDIX A

INFORMED CONSENT

Informed Consent

The purpose of this research study is to examine how body dissatisfaction impacts career aspirations, career expectations, educational aspirations, and perceived career barriers of women. Your help with this study may aid educators, administrators, and counselors in better responding to the career- and education-planning activities of women experiencing issues related to body image.

To participate in this study, click on the "I agree" button on the next page. You will then be directed to an online survey, which will take approximately 20-30 minutes to complete. There is no anticipated discomfort contributing to this study, so risk to participants is minimal. However, it is possible that you may feel uncomfortable answering some of questions in the survey. If this is the case, you may end participation at any time without penalty. A list of resources will be provided that may be helpful should you experience distress.

Your responses will be kept strictly confidential and will be stored on a password-protected computer. This data will be accessible only to the researcher working on this project. Anonymity is guaranteed in the reporting of the data. All research findings will be reported in aggregate or summary form. Study results may be disseminated through national media and publications, but only group data will be presented or published. In addition, only group data will be shared with the University of Utah.

If you have any questions, concerns, or complaints, or if you feel you have been harmed by this research, please contact Alexandra Pappas, Doctoral Candidate, Counseling Psychology, Department of Educational Psychology, University of Utah, at 801-581-7148 or Ali.Pappas@utah.edu. This study is being completed under the supervision of Dr. Paul Gore, Jr., Department of Educational Psychology, University of Utah, Paul.Gore@utah.edu.

Please contact the Institutional Review Board (IRB) if you have questions regarding your rights as a research participant. Also, please do not hesitate to contact the IRB if you have questions, complaints, or concerns that you do not feel you can discuss with the investigator. The University of Utah IRB may be reached by phone at (801) 581-3655 or by e-mail at irb@hsc.utah.edu.

By clicking on the "I agree" button on the next page, you are giving your consent to participate in this survey and will then be directed to the survey.

Thank you for participating in this important project!

APPENDIX B

STUDY MEASURES

Study Measures

Demographics

1. What is your age? (18+)

2. Please specify your race/ethnicity:

   Asian/Pacific Islander
   Black/African American
   Hispanic/Latina
   Native American/American Indian
   White/Caucasian
   Other (please specify):

3. What is the highest level of education completed by your mother?

   Some High School
   Graduated High School/GED
   Some College
   Associate's Degree
   Bachelor's Degree
   Master's Degree
   Professional/Doctorate Degree
   N/A

4. What is the highest level of education completed by your father?

   Some High School
   Graduated High School/GED
   Some College
   Associate's Degree
   Bachelor's Degree
   Master's Degree
   Professional/Doctorate Degree
   N/A

5. Please specify your sexual orientation:

   Asexual
   Bisexual

Gay
Heterosexual
Lesbian
Pansexual
Questioning
Other (please specify):
Prefer Not to Answer

Career Aspirations/Expectations

1. What occupation would you like to have as your lifetime career? ____[text box]_____
2. What occupation do you expect to have as your lifetime career? _____[text box]_____

Validity Item

1. If you are reading this question please select "2"

Educational Aspirations

1. What is the highest level of education that you have completed?

   Some High School
   Graduated High School/GED
   Some College
   Associate's Degree
   Bachelor's Degree
   Master's Degree
   Professional/Doctorate Degree

2. How far do you plan to go in school?

   Some High School
   Graduated High School/GED
   Some College
   Associate's Degree
   Bachelor's Degree
   Master's Degree
   Professional/Doctorate Degree

BMI (CDC, 2014)

What is your height (in inches; 1 foot=12 inches)? __[text box]____
What is your weight (in pounds; 1lb=16oz)? ___[text box]____

Body Image and Body Change Inventory: Body Dissatisfaction Scale Revised (Ricciardelli and McCabe, 2002)

For each of the following questions, please indicate your level of satisfaction using the scale provided below.

1	2	3	4	5
Very happy	A bit happy	Nuetral	A bit unhappy	Very unhappy

Thinking about your body…

1. How happy are you with your weight? [1-5]
2. How happy are you with your body shape? [1-5]
3. How happy are you with your thighs and legs? [1-5]
4. How happy are you with your waist and stomach? [1-5]
5. How happy are you with your chest and arms? [1-5]

Self-Esteem Scale (Rosenberg, 1965)

Below is a list of statements dealing with your general feelings about yourself. Please indicate how strongly you agree or disagree with each statement.

1. On the whole, I am satisfied with myself.

Strong Disagree Disagree Agree Strongly Agree

2. At times I think I am no good at all.

Strong Disagree Disagree Agree Strongly Agree

3. I feel that I have a number of good qualities.

Strong Disagree Disagree Agree Strongly Agree

4. I am able to do things as well as most other people.

Strong Disagree Disagree Agree Strongly Agree

5. I feel I do not have much to be proud of.

Strong Disagree Disagree Agree Strongly Agree

6. I certainly feel useless at times.

Strong Disagree Disagree Agree Strongly Agree

7. I feel that I'm a person of worth, at least on an equal plane with others.

Strong Disagree Disagree Agree Strongly Agree

8. I wish I could have more respect for myself.

Strong Disagree Disagree Agree Strongly Agree

9. All in all, I am inclined to feel that I am a failure.

Strong Disagree Disagree Agree Strongly Agree

10. I take a positive attitude toward myself.

Strong Disagree Disagree Agree Strongly Agree

**Items 2, 5, 6, 8, and 9 are reverse scored.

Career Barriers Inventory (Swanson & Tokar, 1991)

A "barrier" is a factor that interferes with progress in your job or career plans. Barriers can be "external" or "internal." External barriers are found in the environment -- for example, job discrimination or low salary. Internal barriers are more psychological in nature -- for example, low self-esteem. These barriers may occur regarding your choice of career, in finding a job, while you are working in your job or career, or in how you balance your career with other aspects of your life.

For each of the common barriers listed below, think about how much it would hinder your career progress. In other words, how much would this barrier interfere with your career progress, or make your progress difficult? Mark your answers, using the following scale:

Would not hinder at all Would somewhat hinder Would hinder completely

|---|---|---|---|---|---|---|

1 2 3 4 5 6 7

1. Unsure of my career goals
2. Needing to take time off work when children are sick or on school breaks
3. Experiencing racial discrimination in hiring for a job
4. Needing to relocate because of my spouse's/partner's job
5. Changing my mind again and again about my career plans
6. Having a disability which limits my choice of careers
7. Discrimination by employer because I have, or plan to have, children
8. Unsure of how to "sell myself" to an employer
9. Becoming bored with my job/career
10. Being discouraged from pursuing fields which are nontraditional for my sex (e.g., engineering for women, nursing for men)
11. Feeling a conflict between my job and my family (spouse and/or children)
12. Having a boss or supervisor who is biased against people of my racial/ethnic group
13. Experiencing problems with my health that interfere with my job/career
14. Unsure of my work-related values
15. Allowing my spouse's desire for children to take precedence over my career goals
16. Difficulty in finding a job due to a tight job market
17. Feeling pressure to "do it all" - expected to do well as parent, spouse, career person,

etc.

18. Not feeling confident about my ability on the job
19. Not being able to find good day-care services for my children
20. My spouse/partner doesn't approve of my choice of job/career

Validity Question: If you are reading this question, please select "7"

21. Not feeling confident about myself in general
22. Not wanting to relocate for my job/career
23. Feeling guilty about working while my children are young
24. Experiencing racial harassment on the job
25. Experiencing discrimination in hiring for a job because I have a disability
26. Not being paid as much as coworkers of the opposite sex
27. Being undecided about what job/career I would like
28. Stress at home (spouse or children) affecting my performance at work
29. Lacking the required personality traits for my job (e.g., assertiveness)
30. Disappointed in my career progress (e.g., not receiving promotions as often as I would like)
31. Other people's beliefs that certain careers are not appropriate for people of my sex
32. Losing interest in my job/career
33. Difficulty in re-entering job market after taking time off to care for my children
34. Difficulty in planning my career due to changes in the economy
35. Lacking the required skills for my job (e.g., communication, leadership, decision-making)
36. Experiencing racial discrimination in promotions in job/career
37. Difficulty in maintaining the ground gained at my job after having children
38. Not being sure how to choose a career direction
39. Unsure of what my career alternatives are
40. Conflict between marriage/family plans and my career plans
41. Lack of maturity interferes with my career
42. Not having a role model or mentor at work
43. Experiencing sex discrimination in hiring for a job
44. Not receiving support from my spouse/partner
45. Having low self-esteem
46. Discrimination due to my marital status
47. My parents/family don't approve of my choice of job/career
48. Having a boss or supervisor who is biased against people of my sex
49. People of the opposite sex receive promotions more often than people of my sex
50. No opportunities for advancement in my career
51. Not being paid as much as coworkers of another racial/ethnic group
52. My belief that certain careers are not appropriate for me because of my sex

53. Having children at a "bad time" in my career plans
54. People of other racial/ethnic groups receive promotions more often than people of my racial/ethnic group
55. Lacking information about possible jobs/careers
56. The outlook for future employment in my field is not promising
57. Being dissatisfied with my job/career
58. Unable to deal with physical or emotional demands of my job
59. Unsure of what I want out of life
60. Having an inflexible work schedule that interferes with my family responsibilities

Validity Question: If you are reading this question, please select "4"

61. Unsure of how to advance in my career
62. Lacking the necessary educational background for the job I want
63. Experiencing sexual harassment on the job
64. Fear that people will consider me "unfeminine"/"unmasculine" because my job/career is nontraditional for my sex
65. Not knowing the "right people" to get ahead in my career
66. Lacking the necessary hands-on experience for the job I want
67. Lack of opportunities for people of my sex in nontraditional fields
68. No demand for my area of training/education
69. Stress at work affecting my life at home
70. My friends don't approve of my choice of job/career

Body Weight/Size Barriers Subscale

1. Experiencing discrimination in hiring for a job due to my body weight
2. Feeling my choices of careers are limited because of my body weight
3. Having a boss or supervisor who is biased against people of my body weight
4. Experiencing harassment on the job because of my body weight
5. Not being paid as much as coworkers of a different body weight
6. Experiencing body weight discrimination in promotions in job/career
7. Other peoples' beliefs that certain careers are not appropriate for people of my body weight
8. Lack of opportunities for people with my body weight in traditional fields (e.g., teaching for women, engineering for men)
9. My belief that certain careers are not appropriate for me because of my body weight

APPENDIX C

SURVEY CODE MESSAGE

Survey Code Message

On the next page you will receive a survey code. Be sure to record and save this code in order to receive compensation for your participation in this survey. You will not be able to retrieve the survey code once exiting the survey. The researcher is not responsible for compensation if you do not accurately record and save the survey code.

APPENDIX D

END OF SURVEY FORM

End of Survey Form

Thank you for your participation in this study!

If you have any questions, concerns, complaints, or if you feel you have been harmed by this research, please contact Alexandra Pappas, Doctoral Candidate, Counseling Psychology, Department of Educational Psychology, University of Utah, at (801) 581-7148 or Ali.Pappas@utah.edu. This study is being completed under the supervision of Dr. Paul Gore, Jr., Department of Educational Psychology, University of Utah, Paul.Gore@utah.edu.

Please contact the Institutional Review Board (IRB) if you have questions regarding your rights as a research participant. Also, please do not hesitate to contact the IRB if you have questions, complaints, or concerns that you do not feel you can discus with the investigator. The University of Utah IRB may be reached by phone at (801) 581-3655 or by e-mail at irb@hsc.utah.edu

If you are interested in obtaining resources related to eating disorders and body image, please visit the National Eating Disorders Association (NEDA) website at the following link: http://www.nationaleatingdisorders.org/resource-links

APPENDIX E

HOLLAND CODE KEY

Holland Code Key

Participant Response *Holland Code Assigned*

Accounting Assistant……..Accounting Clerk (clerical) (CSR)

Animal Care Specialist……...Animal Caretaker (any industry) (RCS)

Background Investigator……..Investigator, Private (business ser.) (ESI)

Banker……..Sales Representative, Financial Services (financial) (ESA)

Billing Analyst……...Billing Clerk (clerical) (CRS)

Business Owner……..……... Entrepreneur (ESR)

Child-care worker…….Child-care Attendant, School (personal ser.) (RES)

Cleaner……...Housekeeper, Home (domestic ser.) (ESR)

CNA……...Nurse Assistant (SER)

Communications Manager……...Public Relations Representative (profess. & kin.) (ASE)

Computer Engineer……..Programmer, Engineering and Scientific (profess. & kin.) (IRE)

Computer Forensics……..Programmer, Engineer and Scientific (profess. & kin.) (IRE)

Computer Programmer/Programmer……..Computer Programmer (IRC)

Computer Tech……..Programmer, Engineer and Scientific (profess. & kin) (IRE)

Conservation Officer…….Conservator, Artifacts (profess. & kin) (RIS)

Craft Store Supervisor…….Manager, Retail Store (ESC)

Credit Manager……Credit Analyst (Financial) (CRS)

Crime Scene Investigator……..Detective (government ser.) (ESC)

Customer Service Trainer…….Customer Service Representative Instructor (SEC)

Customer Service Representative……Customer-Service Clerk (retail trade) (ESC)

Data analyst…….Data Communications Analyst (profess. & kin.) (RSI)

Data Entry……Data Entry Clerk (CSE)

Director of an EOC……...Director, Community Organization (nonprofit org.) (SEA)

Director of Communications…...Public-Relations Representative (profess. & kin.) (ASE)

Director of Science Department…….Director of Institutional Research (education) (ESC)

Director of Non-Profit……..Director, Community Organization (nonprofit org.) (SEA)

Director of Legal Operations……..……Director, Compliance (government ser.) (SEA)

Dispatcher……..Dispatcher, Service or Work (utilities) (ESR)

Doctor……..General Practitioner (ISE)

Drafting……..Drafter Apprentice (profess. & kin.) (IRE)

Education Assistant…….Teacher Aide I (SCE)

Educational Diagnostician…….Educational Specialist (education) (EIS)

Educational Sign Language Interpreter……Interpreter, Deaf (SCE)

Emergency Management…….Disaster/Damage Control Specialist (military ser.) (ERI)

Entrepreneur/Investor…….Entrepreneur (ESR)

Executive/Junior Executive…….Business Enterprise Officer (EIR)

Fashion Director……Fashion Coordinator (EAS)

Film Director……...Director, Motion Picture (ASE)

Financial Analyst/Financial Advisor……...Financial Planner (profess. & kin.) (ESC)

Financial Auditor…….Auditor (EIS)

Foreclosure billing specialist…….Billing Clerk (CRS)

Forensic Analysis/Forensic Pathologist/Forensic Scientist……...Criminalist (IRC)

Fund Manager……...Investment Analyst (CIE)

Gallery Assistant……...Exhibit-Display Representative (any industry) (ESR)

Hospital Administrator……Administrator, Health Care Facility (medical ser.) (SER)

Human Resources Director……..Director, Employment Services (ESR)

Human Resources……..Human Resource Advisor (ESR)

Income Tax Specialist……Tax Preparer (CES)

Indexer…….Clerk, General (clerical) (CRS)

Insurance Agent……..Sales Agent, Insurance (insurance) (ESC)

Insurance Billing/Collector……Collection Clerk (financial) (CSR)

International Account Manager……Account Executive (AES)

International Compliance Representative...Director, Compliance (government ser.) (SEA)

Inventory Control Representative……..Inventory Clerk (RCI)

IT….....Programmer, Engineering and Scientific (profess. & kin.) (IRE)

Journalist……...Reporter (print. & pub; radio-tv broad.) (ASI)

Kayak Tour Guide……Guide, Travel (ESC)

Knowledge Manager……..Manager, Education and Training (education) (EIS)

Laboratory Worker…….Laboratory Tester (any industry) (RIC)

Leader of an Organization……Director, Community Organization (nonprofit org.) (SEA)

Linguist……..Interpreter (profess. & kin.) (ESA)

Maintenance Engineer……Maintenance Mechanic (any industry) (REI)

Manager……...Manager, Department (any industry) (ESA)

Marketing Representative…….. Sales-Promotion Representative (wholesale tr.) (ESA)

Medical Coder…….Medical Record Technician (CIR)

Medical/Lab Tech……..Medical-Laboratory Technician (medical ser.) (IRE)

Museum Exhibition Developer……Museum Technician (museums) (REI)

Nail Technician……..Manicurist (personal ser.) (ESC)

Nanny……..Child-Care Attendant, School (personal ser.) (RES)

Network Engineer……..Systems Analyst (profess. & kin.) (IER)

Nursing Home Activity Director…….Recreational Therapist (medical ser.) (SEC)

Nutrition Counselor…….Dietician, Clinical (profess. & kin.) (SIE)

Optical Consultant…….Optician (optical goods; retail trade) (REI)

Pathology Assistant……Medical Assistant (SCR)

Patient Access Specialist……...Patient Agent (EAI)

Personal Care Attendant……...Personal Attendant (SEC)

Philanthropist…….Fundraiser I (nonprofit org.) (SEC)

Police Detective…….Detective (government ser.) (SER)

Police Dispatcher…….Dispatcher (government ser.) (SEC)

Prepress Operator……...Press Operator, Heavy Duty (any industry) (RSE)

Private Chef…….Chef (hotel & rest.) (ESR)

Public Health Researcher…….Public Health Microbiologist (government ser.) (ISC)

Quality Engineer……..Quality Control Engineer (profess. & kin.) (IRE)

Quality Inspector……..Inspector, Quality Assurance (government ser.) (IRE)

Real Estate Broker……..Business-Opportunity and Property-Investment Broker (ESA)

Real Estate Investor……Business-Opportunity and Property-Investment Broker (ESA)

Research Assistant/Research Associate……..Research Assistant II (profess. & kin.) (ISC)

Restaurant employee…….Waiter/Waitress, Informal (hotel & rest.) (ESC)

Restorative Justice Counselor…….Counselor (profess. & kin.) (SAE)

Retail……Sales Clerk (retail trade) (ESR)

Sales Agent, Grocery Store…..Sales Representative, Food Products (wholesale tr.) (ESA)

Seamstress……..Tailor Apprentice, Alteration (garment; personal ser.; retail trade) (RIE)

Self-Employed……..…… Entrepreneur (ESR)

Sonographer……..Ultrasound Technologist (RSI)

Special Investigator……..Investigator, Private (ESI)

Spiritual Mentor/Spiritual Counselor…….Clergy Member (profess. & kin.) (SAE)

Tax Consultant……...Tax preparer (CES)

Technical Design in Fashion……..Fashion Designer (ASR)

Technical Sales…….Sales Representative, General Merchandise (wholesale tr.) (ESA)

Technical Support……..Technical Support Specialist (profess. & kin.) (SER)

Telemarketing/Telecommunications……Telecommunicator (government ser.) (SIC)

Therapist…….Counselor (SAE)

Trader/Wall Street Trader……Brokerage Clerk I (financial) (CSR)

Transcriptionist……...Medical Secretary (medical ser.) (CES)

Transportation Security…….Security Officer (any industry) (ESR)

Travel Blogger…….Writer, Prose, Fiction, and Nonfiction (profess. & kin.) (AIE)

Travel Photographer…….Photographer, Still (profess. & kin.) (ARS)

University Administrator…….Department Head, College or University (education) (ESI)

Videogame Designer……...Computer Programmer (profess. & kin.) (IRC)

X-ray Technician……Radiological Technologist (medical ser.) (SRI)

REFERENCES

Aldona, A., & Aiste, U. (2010). Motives and career barriers choosing studies in Physics and Mathematics: gender aspects. *Romanian Journal of Applied Psychology, 12*(1), 21–30.

Ali, S., & McWhirter, E. (2006). Rural Appalachian youth's vocational/educational postsecondary aspirations: Applying social cognitive career theory. *Journal of Career Development, 33,* 87–111.

Alley, T. R., & Scully, K. (1994). The impact of actual and perceived changes in body weight on women's physical attractiveness. *Basic and Applied Social Psychology, 15*(4), 535–542.

Arbona, C., & Novy, D. (1991). Career aspirations and expectations of Black, Mexican American, and White students. *Career Development Quarterly, 39*, 257–268.

Armstrong, P. I., & Crombie, G. (2000). Compromises in adolescents' occupational aspirations and expectations from grades 8 to 10. *Journal of Vocational Behavior, 56,* 82–98.

Attie, I., & Brooks-Gunn, J. (1989). The development of eating problems in adolescent girls: A longitudinal study. *Developmental Psychopathology, 2*, 332–368.

Averett, S., & Korenman, S. (1996). The economic reality of the beauty myth. *Journal of Human Resources, 31*(2), 304–330.

Bagley, C., Character, C., & Shelton, L. (2003). Eating disorders among urban and rural African American and European American women. In M. E. Banks & E. Kaschak (Eds.), *Women with visible and invisible disabilities: Multiple intersections, multiple issues, multiple therapies* (pp. 57–79). Binghamton, NY: Haworth.

Bandura A. (1991). Social cognitive theory of moral thought and action. In W. M. Kurtines & J. L. Gewirtz (Eds.), *Handbook of moral behavior and development* (pp. 45-103). Hillsdale, NJ: Erlbaum.

Bandura A. (1993). Perceived self-efficacy in cognitive development and functioning. *Educational Psychology, 28,* 117–48.

Beal, S., & Crockett, L. (2010). Adolescents' occupational and educational aspirations and expectations: Links to high school activities and adult educational attainment. *Developmental Psychology, 46*(1), 258–265.

Becker, A. E. (2004). Television, disordered eating, and young women in Fiji: Negotiating body image and identity during rapid social change. *Culture, Medicine, and Psychiatry, 28,* 533–559.

Bendick, M., & Nunes, A. (2012). Developing the research basis for controlling bias in hiring. *Journal of Social Issues, 68*(2), 238–262.

Beutell, N. J., & Wittig-Berman, U. (1999). Predictors of work-family conflict and satisfaction with family-job, career, and life. *Psychological Reports*, *85*, 893–903.

Bogie, D. (1976). Occupation aspiration-expectation discrepancies among high school seniors. *Vocational Guidance Quarterly, 24*(3), 250–255.

Bonafini, B. A., & Pozzilli, P. (2011). Body weight and beauty: The changing face of the ideal female body weight. *Obesity Reviews, 12,* 62–65.

Bordo, S. (2003). *Unbearable weight: Feminism, Western culture, and the body* (2nd ed.). Berkeley: University of California Press.

Bosman, C., Pfann, F., & Hamermesh, D.(2006). Changing looks and changing 'discrimination': The beauty of economists. *Economics Letters, 93*(3), 405-412.

Brown, S. D., & Gore, P. A. (1994). An evaluation of interest congruence indices: Distribution characteristics and measurement properties. *Journal of Vocational Behavior, 45*, 310–327.

Brown, S. D., Lent, R. W., & Hackett, G. (1994). Toward a unifying social cognitive theory of career and academic interest, choice, and performance. *Journal of Vocational Behavior, 45,* 79–122.

Brueckner, H. (2004). *Gender inequality in the life course*: *Social change and stability in West Germany, 1975-1995.* New York: AldineTransaction.

Budge, S., Tebbe, E., & Howard, K. (2010). The work experiences of transgender individuals: Negotiating the transition and career decision making decision-making processes. *Journal of Counseling Psychology, 57*(4), 377–393.

Burlew, A., & Johnson, J. (1992). Role conflict and career advancement among African American women in nontraditional professions. *Career Development Quarterly, 40,* 303-312.

Buhrmester, M., Kwang, T., & Gosling, S. (2011). Amazon's Mechanical Turk: A new source of inexpensive, yet high-quality, data? *Perspectives of Psychological*

Science, 6(1), 3–5.

Cachelin, F., Striegel-Moore, R., & Elder, K. (1998). Realistic weight perception and body size assessment in a racially diverse community sample of dieters. *Obesity Research, 6*(1), 62–68.

Cafri, G., Strauss, J., & Thompson, J. K. (2002). Male body image: Satisfaction and its relationship to psychological functioning using the somatomorphic matrix. *International Journal of Men's Health, 1*, 215–231.

Calogero, R., Boroughs, M., &Thompson, J. (2007). The impact of Western beauty ideals on the lives of women and men: A sociocultural perspective. In V. Swami & A. Furnham (Eds.), *Body beautiful: Evolutionary and sociocultural perspectives* (pp. 259–297). Basingstoke, UK: Palgrave Macmillan.

Calzo, J. P., Sonneville, K. R., Haines, J., Blood, E. A., Field, A. E., & Austin, S. B. (2012). The development of associations among body mass index, body dissatisfaction, and weight and shape concern in adolescent boys and girls. *Journal of Adolescent Health, 51,* 517–523.

Cann, A. (1991). Stereotypes about physical and social characteristics based on social and professional competence information. *The Journal of Social Psychology, 131*(2), 225–231.

Carlat, D., Camargo, C., & Herzog, D. (1997). Eating disorders in males: A report on 135 patients. *American Journal of Psychiatry, 154*(8), 1127-1132.

Cash, T.F. (2002). The management of body image problems. In C. Fairburn & K. Brownell (eds.), *Eating disorders and obesity: A comprehensive handbook* (2nd ed., pp. 599–603). New York: Guilford Press.

Cash, T.F., & Pruzinsky, T. (2002). Future challenges for body image theory, research, and clinical, practice. In T.F. Cash & T. Pruzinsky (Eds.), *Body images: A handbook of theory, research, and clinical practice* (pp. 509-516). New York: Guilford Press.

Center for Disease Control. (2015). Body Mass Index (BMI). Retrieved from https://www.cdc.gov/healthyweight/assessing/bmi

Cochran, A., Hauschild, T., Elder, W., Neumayer, L., Brasel, K., & Crandall, M. (2013). Perceived gender-based barriers to careers in academic surgery. *American Journal of Surgery, 206*(2), 263–268.

Cohen, A., Rehkopf, D., Deardorff, J., & Abrams, B. (2013). Education and obesity at age 40 among American adults. *Social Science & Medicine, 78,* 34–41.

Cohen, D., & Hoshino-Browne, E. (2005). Insider and outsider perspectives on the self and social world. In R. M. Sorrentino, D. Cohen, J. M. Olson, & M. P. Zanna (Eds.), *Culture and social behavior: The tenth Ontario symposium* (pp. 49–76). Hillsdale, NJ: Lawrence Erlbaum.

Cohen. J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Lawrence Erlbaum.

Collins, M. E. (1991) Body figure perceptions and preferences among preadolescent children. *International Journal of Eating Disorders, 10*(2), 199–208.

Conley, D., & Glauber, R. (2005). Gender, body mass, and economic status. Retrieved from www.nber.org/papers/w11343.pdf

Cook, T., Church, M., Ahanaku, S., Shadish, W., Kim, J., & Cohen, R. (1996). The development of occupational aspirations and expectations among inner-city boys. *Child Development, 67*(6), 3368–3385.

Cook, E. (1997). Gender discrimination in Jessica's career. *The Career Development Quarterly, 46*, 148–154.

Cosby, A., & Picou, S. (1971). Agricultural students and anticipatory occupational goal deflection. *Rural Sociology, 37,* 211–214.

Crites, J. (1969). *Vocational psychology: The study of vocational behavior and development.* New York: McGraw-Hill.

Crocker, P., Sabiston, C., Forrestor, S., Kowalski, N., Kowalski, K., & McDonough, M. (2003). Predicting change in physical activity, dietary restraint, and physique anxiety in adolescent girls. *Revue Canadienne De Sante Publique, 94*(5), 332–337.

Crosnoe, R., & Mueller, C. (2004). Body mass index, academic achievement, and school context: Examining the educational experiences of adolescents at risk of obesity. *Journal of Health and Social Behavior, 45*(4), 393–407.

Crosnoe, R., Frank, K., & Strassmann Mueller, A. (2008). Gender, body size, and social relations in American high schools. *Social Forces, 86*(3), 1189–1216.

Curry, E., & Picou, S. (1971). Rural youth and anticipatory occupational goal deflection. *Journal of Vocational Behavior, 1,* 317–330.

Dahling, J, Melloy, R., & Thompson, M. (2013). Financial strain and regional unemployment as barriers to job search self-efficacy: A test of social cognitive career theory. *Journal of Counseling Psychology, 60*(2), 210–218.

Datar, A., Sturm, R., & Magna-Bosco, J. (2004). Childhood overweight and academic performance: National study of kindergarteners and first-graders. *Obesity Research, 12*(1), 58–68.

Davis, D. C., & Krawczyk, J. (2010). Female sportscaster credibility: Has appearance taken precedence? *Journal of Sports Media, 5*(2), 1–34.

Del Corso, J., & Rehfuss, M. (2011). The role of narrative in career construction theory. *Journal of Vocational Behavior, 79*(2), 334–339.

Dellinger, K., & Williams, C. L. (1997). Makeup at work: Negotiating appearance rules in the workplace. *Gender & Society, 11,* 151–177.

Dorak, F. (2011). Self-esteem and body image of Turkish adolescent girls. *Social Behavior and Personality, 39*(4), 553–562.

Eagly, A., H., Ashmore, R. D., Makhijani, M. G., & Longo, L. C. (1991). What is beautiful is good, but…A meta-analytic review of research on the physical attractiveness stereotype. *Psychological Bulletin, 110,* 109–128.

Eggerth, D. E. (2008). From theory of work adjustment to person-environment correspondence counseling: Vocational psychology as positive psychology. *Journal of Career Assessment, 16*, 60–74.

Engeln-Maddox, R., (2006). Buying beauty standard or dreaming of a new life? Expectations associated with media ideals. *Psychology of Women Quarterly, 30,* 258–266.

Etcoff, N., Orbach, S., Scott, J., & D'Agostino, H. (2006). Beyond stereotypes: Rebuilding the foundation of beauty beliefs: Findings of the 2005 Dove Global Study. Retrieved from http://www.campaign forrealbeauty.com/DoveBeyondStereotypesWhitepaper.pdf

Farmer, H. (1976). What inhibits career and achievement motivation in women? *The Counseling Psychologist, 6*(2), 12–14.

Farmer, H. (1985). Model of career achievement motivation for women and men. *Journal of Counseling Psychology, 32*(3), 363–390.

Farmer, H., & Chung, Y. (1995). Variables related to career commitment, mastery, motivation and level of career aspiration among college students. *Journal of Career Development, 21*(4), 265–278.

Feingold, A. (1992). Good-looking people are not what we think. *Psychological Bulletin, 111,* 304–341.

Ferri, A. (1988). Perceived career barriers of men and women television news anchors. *Journalism and Mass Communication Quarterly, 65*, 661–667, 732.

Ferri, A., & Keller J. (1986). Perceived career barriers for female television news anchors. *Journalism Quarterly, 63*, 463–467.

Ferrie, J., Shipley, M., Stansfeld, S., & Marmot, M. (2002). Effects of chronic job insecurity and change in job security on self reported health, minor psychiatric morbidity, physiological measures, and health related behaviors in British civil servants: The Whitehall II study. *Journal of Epidemiology and Community Health, 56*, 450–454.

Fitzgerald, L., & Weitzman, L. (1992). Women's career development: Theory and practice from a feminist perspective. In H.D. Lea & Z. B. Leibowitz (Eds.), *Adult career development: Concepts, issues, and practices* (pp. 124–160). Alexandria, VA: The National Career Development Association.

Fredrickson, B., Roberts, T., Noll, S., Quinn, D., & Twenge, J. (1998). That swimsuit becomes you: Sex differences in self-objectification, restrained eating, and math performance. *Journal of Personality and Social Psychology, 75*, 269–284.

French, M. (2002). Physical appearance and earnings: Further evidence. *Applied Economics, 34*(5), 569–572.

French, S. A., Story, M., & Perry (1995). Self-esteem and obesity in children and adolescents: a literature review. *Obesity Research, 3,* 479–490.

Frieze, I., Olson, J., & Russell, J. Attractiveness and income for men and women in management. *Journal of Applied Social Psychology, 21*(13), 1039–1057.

Fuller-Tyszkiewcz, M., Skouteris, H., McCabe, M., & Mussap, A. (2012). An evaluation of equivalence in body dissatisfaction measurement across cultures. *Journal of Personality Assessment, 94*(4), 410–417.

Furnham, A., & Radley, S. (1989). Sex differences in the perception of male and female body shapes. *Personality and Individual Differences, 10,* 653–662.

Gasser, C. (2013). Career self-appraisals and educational aspirations of diverse first-year college students. *College Student Journal, 47*(2), 364–372.

Gassin, E., Kelly, K., & Feldhusen, J. F. (1993). Sex differences in the career development of gifted youth. *School Counselor, 41*(2), 90–95.

Geis, F. (1993). Self-fulfilling prophecies: A social psychological view of gender. In A. E. Beall & R. J. Sternberg (Eds.), *The psychology of gender* (pp. 9–54). New York: Guilford.

Glass, C. M., Haas, S. A., & Reither, E. N. (2010). The skinny on success: Body mass, gender and occupational standing across the life course. *Social Forces, 88*(4), 1777–1806.

Gortmaker, S. L., Must, A., Perrin, J. M., Sobol, A. M., & Dietz, W. H. (1993). Social and economic consequences of overweight in adolescence and young adulthood. *The New England Journal of Medicine, 329*(14), 1008–1012.

Gottfredson, G. D., & Holland, J. L. (1996). *Dictionary of Holland occupational codes* (3rd ed.). Odessa, FL: Psychological Assessment Resources.

Gottfredson, L. S. (1981). Circumscription and compromise: A developmental theory of occupational aspirations. *Journal of Counseling Psychology (Monograph), 28*(6), 545–579.

Groesz, L., Levine, M., & Murnen, S. (2002). The effect of experimental presentation of thin media images on body satisfaction: A meta-analytic review. *International Journal of Eating Disorders, 31,* 1–16.

Gutman, L. M., & Schoon, I. (2012). Correlates and consequences of uncertainty in career aspirations: Gender differences among adolescents in England. *Journal of Vocational Behavior, 80*(3), 608–618.

Halpern, C., Udry, J., Campbell, B., & Suchindran, C. (1998) Effects of body fat on weight concerns, dating, and sexual activity: A longitudinal analysis of black and white adolescent girls. *Developmental Psychology, 35*(3), 721–736.

Hamermesh, D., & Biddle, J. (1994). Beauty and the labor market. *American Economic Review, 84*(5), 1174–1194.

Hannerz, H., Albertsen, K., Nielsen, M., & Tuchsen, F. (2004). Occuptaional factors and 5-year weight change among men in a Danish national cohort. *Health Psychology, 23*(3), 283–288.

Harlan, A., & Weiss, C. (1982). Sex differences in factors affecting managerial career advancement. In P. Wallace (Eds.), *Women in the workplace* (pp. 59–97). Boston, MA: Auburn House

Harrison, M., & Thomas, K. (2009). The hidden prejudice in selection: A research investigation on skin color bias. *Journal of Applied Social Psychology, 39,* 134–168.

Harter, S. (1999). *The construction of the self: A developmental perspective.* New York: Guilford.

Haskins, K., & Ransford, E. (1999). The relationship between weight and career payoffs among women. *Sociological Forum, 14*(2), 295–318.

Hatfield, E., & Sprecher, S. (1986). *Mirror, mirror…The importance of looks in everyday life.* Albany, NY: State University of New York Press.

Healthy At Every Size. (n.d.). Retrieved from http://haescommunity.com/find/

Henry, P. (2010). Educational and career barriers to the medical profession: Perceptions of underrepresented minority students. *College Student Journal, 40*(2), 429–441.

Holland, J. (1997). *Making vocational choices: A theory of vocational personalities and work environments* (3rd ed.). Odessa, Fl: Psychological Assessment Resources.

Horn, T., Newton, J., & Evers, J. (2011). Gender conceptualizations in female high school seniors: Relationships with global self-worth and multiple measures of body image. *Sex Roles, 65*(5), 383–396.

Hsu, Y., Buckworth, J., Focht, B., & O'Connell, A. (2013). Feasibility of a self-determination theory-based exercise intervention promoting Healthy at Every Size with sedentary overweight women: Project CHANGE. *Psychology of Sport & Exercise, 14*(20), 283–292.

Jackson, L. (1992). *Physical appearance and gender: Sociobiological and sociocultural perspectives.* Albany, NY: SUNY Press.

Jackson, L., Hunter, J., & Hodge, C (1995). Physical attractiveness and intellectual competence: A meta-analytic review. *Social Psychology Quarterly, 58*(2), 108–122.

Johnson, F., & Wardle, J. (2005). Dietary restraint, body dissatisfaction, and psychological distress: A prospective analysis. *Journal of Abnormal Psychology, 114,* 119–125.

Jones, D. C., & Crawford, J. K. (2006). The peer appearance culture during adolescence: Gender and body mass variations. *Journal of Youth and Adolescence*, *35*, 257–269.

Kiefer, A., Sekaquaptewa, D., & Barczyk, A. (2004). When appearance concerns make women look bad: Solo status and body image concerns diminish women's academic performance. *Journal of Experimental Social Psychology, 42,* 78–86.

Kosine, N., Steger, M., & Duncan, S. (2008). Purpose-centered career development: A strengths-based approach to finding meaning and purpose in careers. *Professional School Counseling, 12*(2), 133–136.

Kuvlesky, W., & Bealer, R. (1966). A clarification of the concept "occupational choice." *Rural Sociology, 31,* 265–276.

Kuvlesky, W., & Ohlendorf, G. (1968). A rural-urban comparison of the occupational

status orientations of negro boys. *Rural Sociology, 33,* 141–152.

Kwan, S. (2010). Navigating public spaces: Gender, race, and body privilege in everyday life. *Feminist Formations, 22*(2), 144–166.

Lavender, J., & Anderson, D. (2010). Contribution of emotional regulation difficulties to disordered eating and body dissatisfaction in college men. *Journal of Eating Disorders, 43*(4), 352–357.

Lent, R., Brown, S., & Hackett, G. (1994). Toward a unifying social cognitive theory of career and academic interest, choice, and performance. *Journal of Vocational Behavior, 45,* 79-122.

Lent, R., Sheu, H., & Brown, S. (2010). The self-efficacy–interest relationship and RIASEC type: Which is figure and which is ground? Comment on Armstrong and Vogel (2009). *Journal of Counseling Psychology, 57*(2), 219–225.

Le Grange, D., Stone, A., & Brownell, K. (1998). Eating disturbances in white and minority female dieters. *International Journal of Eating Disorders, 24*(4), 395–403.

Liechty, J. (2010). Body image distortion and three types of weight loss behaviors among nonoverweight girls in the United States. *Journal of Adolescent Health, 47*(2), 176–182.

Lipshits-Braziler, Y., & Tatar, M. (2012). Perceived career barriers and coping among youth in Israel: Ethnic and gender differences. *Journal of Vocational Behavior, 80*(2), 545–554.

Lounsbury, J., Park, S., Sundstrom, E., Williamson, J., & Pemberton, A. (2004). Personality, career satisfaction and life satisfaction: Test of a directional model. *Journal of Career Assessment, 12*(4), 395–406.

Lucero, K., Hicks, R., Bramlette, J., Brassington, G., & Welter, M. (1992). Frequency of eating problems among Asian and Caucasian college women. *Psychological Reports, 71,* 255–258.

Luzzo, D. (1993). Ethnic differences in college students' perceptions of barriers to career development. *Journal of Multicultural Counseling and Development, 21,* 227–236.

Luzzo, D. (1995). Gender differences in college students' career maturity and perceived barriers in career development. *Journal of Counseling & Development, 73,* 319–322.

Luzzo, D. (1996). Exploring the relationship between the perception of occupational barriers and career development. *Journal of Career Development, 22,* 319–322.

Luzzo, D., & Hutcheson, K. (1996). Causal attributions and sex differences associated with perceptions of occupational barriers. *Journal of Counseling & Development, 75,* 124–130.

Markus, H., & Nurius, P. (1986). Possible selves. *American Psychologist, 41*(9), 954-969.

Mau, W. C. (1995). Decision-making styles as a predictor of career decision status and treatment gains. *Journal of Career Assessment, 3,* 90–101.

Mau, W. C., & Bikos, L. H. (2000). Educational and vocational aspirations of minority and female students: A longitudinal study. *Journal of Counseling & Development, 78*(2), 186–194.

McCarthy, M. (1990). The thin ideal, depression, and eating disorders in women. *Behavior Research and Therapy, 28*(3), 205–214.

McCreary, D. R., & Sasse, D. K. (2000). An exploration of the drive for muscularity in adolescent boys and girls. *Journal of American College Health, 48*(6), 297–304.

McLaren, L. (2007). Socioeconomic status and obesity. *Epidemiologic Review, 29,* 29–48.

McLaren, L., & Kuh, D. (2004). Body dissatisfaction in midlife women. *Journal of Women & Aging, 16*(1), 35–54.

McWhirter, E., (1994). *Counseling for empowerment.* Alexandria, VA: American Counseling Association Press.

McWhirter, E., Torres, D., & Rasheed, S. (1998). Assessing barriers to women's career adjustment. *Journal of Career Assessment, 6*(4), 449–479.

Mellin, L., McNutt, S., Hu, Y., Schreiber, G.B., Crawford, P., & Obarzanek, E. (1991). A longitudinal study of the dietary practices of black and white girls 9 and 10 years old at enrollment: The NHLBI growth and health study. *Journal of Adolescent Health, 20*(1), 27–37.

Mellor, D., Fuller-Tyszkiewicz, M., McCabe, M., & Ricciardelli, L. (2010). Body image and self-esteem across age and gender: A short-term longitudinal study. *Sex Roles, 63,* 672–681.

Mendez, L., & Crawford, K. (2002). Gender role stereotyping and career aspirations: A comparison of gifted early adolescent boys and girls. *Journal of Secondary Gifted Education, 13*(3), 96–107.

Metz, A.J., Fouad, N., & Ihle-Helledy, K. (2009). Career aspirations and expectations of

college students: Demographic and labor market comparisons. *Journal of Career Assessment 17*(2), 155–171.

Mirza, N. M., Mackey, E. R, Armstrong, B., Jaramillo, A., & Palmer, M. (2011). Correlates of self-worth and body size dissatisfaction among obese Latino youth. *Body Image, 8*(2), 173–178.

Mitra, A. (2001). Effects of physical attributes on the wages of males and females. *Applied Economics Letters 8*(11), 731–735.

Mond, J., Mitchison, D., Latner, J., Hay, P., Owen, C., & Rodgers, B. (2013). Quality of life impairment associated with body dissatisfaction in a general population sample of women. *BMC Public Health, 13,* 920–931.

Morin, A. J. S., Maiano, C., Marsh, H. W., & Nagengast, B. (2013). School life and adolescents' self-esteem trajectories. *Child Development, 84*(6), 1967–1988.

Morris, S. (2006). "Body Mass Index and Occupational Attainment." *Journal of Health Economics, 25*(2), 347–364.

Mullis, R., Mullis, A., & Gerwels, D. (1998). Stability of vocational interests among high school students. *Adolescence, 33*(131), 699–707.

Muenster, E., Rueger, H., Ochsmann, E., Letzel, & Toschke, A. (2011). Association between overweight, obesity and self-perceived jobs insecurity in German employees. *BMC Public Health, 11,* 162–169.

Muth, J. L., & Cash, T. F. (1997). Body-image attitudes: What difference does gender make? *Journal of Applied Social Psychology, 27,* 1438–1452.

Nasser, M. (1988). Culture and weight consciousness. *Journal of Psychosomatic Research, 32,* 573–577.

National Center for Education Statistics (2005). Status and trends in the education of racial and ethnic minorities. *National Center for Education Statistics.* Retrieved from http://nces.ed.gov/pubs2007/minoritytrends/tables/table_5.asp

National Eating Disorders Association (2005). Statistics: Eating disorders and their precursors. Retrieved from http://www.nationaleatingdisorders.org/uploads/file/Statistics%20%20Updated%20Feb%2010,%202008%20B.pdf.

National Health and Nutrition Examination Survey. (2003). Healthy, overweight, and obesity among U.S. adults. Retrieved from http://www.cdc.gov/nchs/data/nhanes/databriefs/adultweight.pdf

Neumark-Sztainer, D., Paxton, S., Hannan, P., Haines, J., & Story, M. (2006). Does body

satisfaction matter? Five-year longitudinal associations between body satisfaction and health behaviors in adolescent females and males. *Journal of Adolescent Health, 39*(2), 244–251.

Nevid, J.S. (1984) Sex differences in factors of romantic attraction. *Sex Roles, 11*, 401–411.

Nevo, S. (1985). Bulimic symptoms: Prevalence and ethnic differences among college women. *International Journal of Eating Disorders, 4*, 151–168.

Nisbett, R.E. (2003). *The geography of thought: How Asians and Westerners think differently...and why.* New York: Free Press.

Offermann, L., Basford, T., Graebner, R., Jaffer, S., De Graaf, S., & Kaminsky, S. (2014). See no evil: colorblindness and perceptions of subtle racial discrimination in the workplace. *Cultural Diversity and Ethnic Minority Psychology, 20*(4), 499–507.

Ogden, C., Carroll, M., Kit, B., & Flegal, K. (2014). Prevalence of childhood and adult obesity in the United States, 2011-2012. *JAMA, 311*(8), 806–814.

Ogden, C., Lamb, M., Carroll, M., & Flegal, K. (2010). Obesity and socioeconomic status in adults: United States, 2005-2008. *NCHS Data Brief, 50,* 1–8.

O'Leary, V. (1974). Some attitudinal barriers to occupational aspirations in women. *Psychological Bulletin, 81,* 809–826.

Pagan, J., & Davila, A. (1997). Obesity, occupational attainment and earning. *Social Science Quarterly, 78*(3), 756–770.

Park, W., & Epstein, N. (2013). The longitudinal causal directionality between body image distress and self-esteem among Korean adolescents: The moderating effect of relationships with parents. *Journal of Adolescence, 36*(2), 403-411.

Parnell, M., Lease, S., & Green M. (2010). Perceived career barriers for gay, lesbian, and bisexual individuals. *Journal of Career Development, 39*(3), 248–269.

Paxton, S. J., Neumark-Sztainer, D., Hannan, P. J., & Eisenberg, M. E. (2006). Body dissatisfaction prospectively predicts depressive mood and low self-esteem in adolescent girls and boys. *Journal of Clinical Child & Adolescent Psychology, 35,* 539–549.

Paxton, S. J., Wertheim, E. H., Gibbons, K., Szmukler, G. I., Hillier, L., & Petrovich, J. L. (1991). Body image satisfaction, dieting beliefs and weight loss behaviors in adolescent girls and boys. *Journal of Youth and Adolescence, 20*, 361–379.

Presnell, K., Bearman, S., & Stice, E. (2004). Risk factors for body dissatisfaction in adolescent boys and girls: A prospective study. *International Journal of Eating Disorders, 36,* 389–401.

Quinn, D., & Crocker, J. (1999). When ideology hurts: Effects of belief in the Protestant ethic and feeling overweight on the psychological well-being of women. *Journal of Personality and Social Psychology, 77*(2), 402–414.

Ragins, B., & Sundstrom, E. (1989). Sex as a status variable in work settings: Female and male reports of dominance behavior. *Journal of Applied Social Psychology, 10,* 71–85.

Raque-Bogdan, T., Klingaman, E., Helena, M., & Lucas, M. (2013). Career-related parent support and career barriers: An investigation of contextual variables. *Career Development Quarterly, 61*(4), 339–353.

Ricciardelli, L. A., & McCabe, M. P. (2002). Psychometric evaluation of the body change inventory: An assessment instrument for adolescent boys and girls. *Eating Behaviors*, *3*, 45–59.

Rodin, J., Silberstein, L., & Striegel-Moore, R. (1984). Women and weight: A normative discontent. *Nebraska Symposium on Motivation, 32,* 267–308.

Rojewski, J.W. (1997). Characteristics of students who express stable or undecided occupational expectations during early adolescence. *Journal of Career Assessment, 5*(1), 1–20.

Rosen, D., Holmberg, K., & Holland, J. (1997). *The educational opportunities finder for use with the Self-Directed Search and the Vocational preference inventory.* Odessa, FL: Psychological Assessment Resources.

Rosenberg, M. (1965). *Society and the adolescent self-image*. Princeton, NJ: Princeton University Press.

Rosenberg, M. (1986). Self-concept from middle childhood through adolescence. In J. Suls (Ed.), *Psychological perspectives on the self* (Vol. 3, pp. 107-136). Hillsdale, NJ: Erlbaum.

Rothblum, E. (1992). The stigma of women's weight: Social and economic realities. *Feminism & Psychology, 2,* 61–73.

Rubinstein, S., & Caballero, B. (2000). Is Miss America an undernourished role model? *JAMA, 283*(12), 1563–1569.

Savickas, M.L. (2002). Career construction: A developmental theory of vocational behavior. In S. D. Brown (Eds.), *Career choice and development* (pp.149-205). San Francisco, CA: Jossey-Bass.

Savickas, M. L. (2005). The theory and practice of career construction. In S.D. Brown & R.W. Lent (Eds.), *Career development and counseling: Putting theory and research to work* (pp. 42-70). Hoboken, NJ: Wiley.

Schoon, I., & Parsons, S. (2002). Teenage aspirations for future careers and occupational outcomes. *Journal of Vocational Behavior, 60*(2), 262–288.

Singh, D. (2004). Mating strategies of young women: Role of physical attractiveness. *Journal of Sex Research, 41*(1), 43–54.

Slaney, R. (1980). An investigation of racial differences on vocational variables among college women. *Journal of Vocational Behavior, 16,* 197–207.

Slaney, R., & Brown, M. (1983). Effects of race and socioeconomic status on career choice variables among college men. *Journal of Vocational Behavior, 23,* 257–269.

Smolak, L. (2006). Body image. In J. Worell & C.D. Goodheart (Eds.), *Handbook of girls' and women's psychological health: Gender and well-being across the lifespan.* Oxford series in clinical psychology (pp. 69–76). New York: Oxford University Press.

Sobal, J., & Stunkard, A. (1989). Socioeconomic status and obesity: A review of the literature. *Psychological Bulletin, 105,* 260–275.

Sørensen, A.B. (1974). "A Model for Occupational Careers." *American Journal of Sociology, 80*(1), 44–57.

Spitzer B., Henderson K., & Zivian M. (1999). A comparison of population and media body sizes for American and Canadian Women. *Sex Roles, 1999,* 545–565.

Staffieri, J. R., (1967) A study of social stereotype of body image in children. *Journal of Personality and Social Psychology, 7*, 101–104.

Statistical Solutions. (2016). Kendall's Tau and Spearman's Rank Correlation Coefficient. Retrieved from http://www.statisticssolutions.com/kendalls-tau-and-spearmans-rank-correlation-coefficient/

Stice, E., Marti, N. C., & Durant, S. (2011). Risk factors for onset of eating disorders: Evidence of multiple risk pathways from an 8-year prospective study. *Behaviour Research and Therapy*, *49*(10), 622–627.

Story, M., French, S. A., Resnick, M. D., & Blum, R. W. (1995). Ethnic/racial and socioeconomic differences in dieting behavior and body image perceptions in adolescents. *International Journal of Eating Disorders, 18,* 173–179.

Striegel-Moore, R., Wilfley, D., Caldwell, M., Needham, & Brownell, K. (1996).

Weight-related attitudes and behaviors of women who diet to lose weight: A comparison of black dieters and white dieters. *Obesity Research, 4,* 109–116.

Suleiman, S. R., (1986). *The female body in Western culture: Contemporary perspectives.* Cambridge, MA: Harvard University Press.

Super, D.E. (1957). *The psychology of careers*. New York: Harper & Row.

Swami, V. (2007). *The missing arms of Vénus de Milo: Reflections on the science of physical attractiveness*. Brighton, UK: Book Guild.

Swami, V., & Tovée, M. J., (2005). Female physical attractiveness in Britain and Malaysia: A cross-cultural study. *Body Image, 2,* 115–128.

Swami, V., Frederick, D., Aavik, T., Alcalay, L., Allik, J., Anderson, D. … Zivcic-Becirevic, I. (2010). The attractive female body weight and female body dissatisfaction in 26 countries across 10 world regions: Results of the International Body Project I. *Personality and Social Psychology Bulletin, 36*(3), 309–325.

Swanson, J. L., & Daniels, K. K. (1994). *The relation of perceived career barriers inventory–revised.* Carbondale, IL: Southern Illinois University Press.

Swanson, J. L., Daniels, K. K., & Tokar, D. M. (1996). Assessing perceptions of career-related barriers: The career barriers inventory. *Journal of Career Assessment, 4*(2), 219–244.

Swanson, J.L., & Gore, P.A. (2000). Advances in vocational psychology theory and research. In S.D. Brown & R. W. Lent (Eds.), *Handbook of counseling psychology* (3rd ed., pp. 233–269). New York: John Wiley.

Swanson, J., & Tokar, D. (1991). Development and initial validation of the Career Barriers Inventory. *Journal of Vocational Behavior, 39,* 344-361.

Swanson, J. L., & Woitke, M. (1997). Theory into practice in career assessment for women: Assessment and interventions regarding perceived barriers. *Journal of Career Assessment, 5*, 443–462.

Thompson, J. K., Coovert, M. D., Richards, K. J., Johnson, S., & Cattarin, J. (1995). Development of body image, eating disturbance, and general psychological functioning in female adolescents: Covariance structure modeling and longitudinal investigations. *International Journal of Eating Disorders, 18*(3), 221–236.

Thompson, J., Heinberg, L., Altabe, M., & Tantleff-Dunn, S. (1999). *Exacting beauty: Theory, assessment, and treatment of body image disturbance.* Washington, DC: American Psychological Association.

Tiggeman, M. (2001). The impact of adolescent girls' life concerns and leisure activities on body dissatisfaction, disordered eating, and self-esteem. *The Journal of Genetic*

Psychology, 162(2), 133–142.

Tiggemann, M. (2005). Body dissatisfaction and adolescent self-esteem: Prospective findings. *Body Image, 2,* 129–135.

Tovée, M. J., & Cornelissesn P. L. (2001). Female and male perceptions of female physical attractiveness in front-view and profile. *British Journal of Psychology, 92,* 391–402.

Treasure, J., Claudino, A. M., & Zucker, N. (2009, November 19). Eating Disorders. Seminar presented at Institute of Psychiatry, King's College London, London, UK.

Umberson, D., & Hughes, M. (1987). The impact of physical attractiveness on achievement and psychological well being. *Social Psychology Quarterly, 50*(3), 227–236.

United States Census Bureau. (2012). Statistics of owners of respondent firms by owner's educational background by gender, ethnicity, race, and veteran status for the U.S. Retrieved from http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=SBO_2012_00CSCBO07&prodType=table

Watson, C. M., Quatman, T., & Edler, E. (2002). Career aspirations of adolescent girls: Effects of achievement level, grade, and single-sex school environment. *Sex Roles, 46*, 323–335.

Watt, H. (2006). The role of motivation in gendered educational and occupational trajectories related to math. *Educational Research and Evaluation, 12*(4), 305–322.

Watt, H. (2008). What motivates females and males to pursue sex-stereotyped careers? In H. Watt & J. Eccles (Eds.), *Gender and occupational outcomes: Longitudinal assessments of individual, social, and cultural influences* (pp. 87-113). Washington, D.C.: American Psychological Association.

Watt, H., Shapka, D., Morris, Z., Durik, A., Keating, D., & Eccles, J. (2012). Gendered motivational processes affecting high school mathematics participation, educational apsirations, and career plans: A comparison of samples from Australia, Canada, and the United States. *Developmental Psychology, 48*(6), 1594–1611.

Webb, R., Lubinski, D., & Benbow, C. (2002). Mathematically facile adolescents with math-science aspirations: New perspectives on their educational and vocational development. *Journal of Educational Psychology, 94*(4), 785–794.

Weiner, B. (1986) An attributional theory of motivation and emotion. New York: Springer-Verlag.

Wiener, Y., Muczyk, J. P., & Martin, H. J. (1992). Self-esteem and job involvement as

moderators of the relationship between work satisfaction and well-being. *Journal of Social Behavior and Personality*, *7*, 539–554.

Wigfield, A., & Eccles, J. (2000). Expectancy-value theory of motivation. *Contemporary Educational Psychology, 25,* 68–81.

Wigfield, A., & Eccles, J. (2002). The development of competence beliefs, expectancies for success, and achievement values from childhood through adolescence. *Development of Achievement Motivation,* 91–120.

Wilcox, S. (1997). Age and gender in relation to body attitudes: Is there a double standard of aging? *Psychology of Women Quarterly, 21,* 549–565.

Wilson, P., & Wilson, R. (1992). Environmental influences on adolescent educational aspirations: A logistic transform model. *Youth & Society, 24*(1), 52–70.

Wiseman, M., Gray, J., Mosimann, J., & Ahrens, A. (1992). Cultural expectations of thinness in women: An update. *International Journal of Eating Disorders, 11,* 85–89.

Wolf, N. (1991). *The beauty myth*. New York: Harper Collins.

World Health Organization. (2000). Obesity: Preventing and managing the global epidemic. World Health Organization. Retrieved from http://www.who.int/nutrition/publications/obesity/WHO_TRS_894/en/

Wright, S. L., Perrone-McGovern, K. M., Boo, J. N., & Vannater White, A., (2014). Influential factors in academic and career self-efficacy: Attachment, supports, and career barriers. *Journal of Counseling & Development, 92,* 36–46.

Yanover, T., & Thompson, J. K. (2008a). Eating problems, body image disturbances, and academic achievement: Preliminary evaluation of the eating and body image disturbances academic interference scale. *International Journal of Eating Disorders, 41,* 184–187.

Yanover, T., & Thompson, J. K. (2008b). Self-reported interference with academic functioning and eating disordered symptoms: Association with multiple dimensions of body image. *Body Image, 5,* 326–328.